

L1: early bird

2008 INNOVATION 3L/3T

AREA Science Park Results



T1: Territory

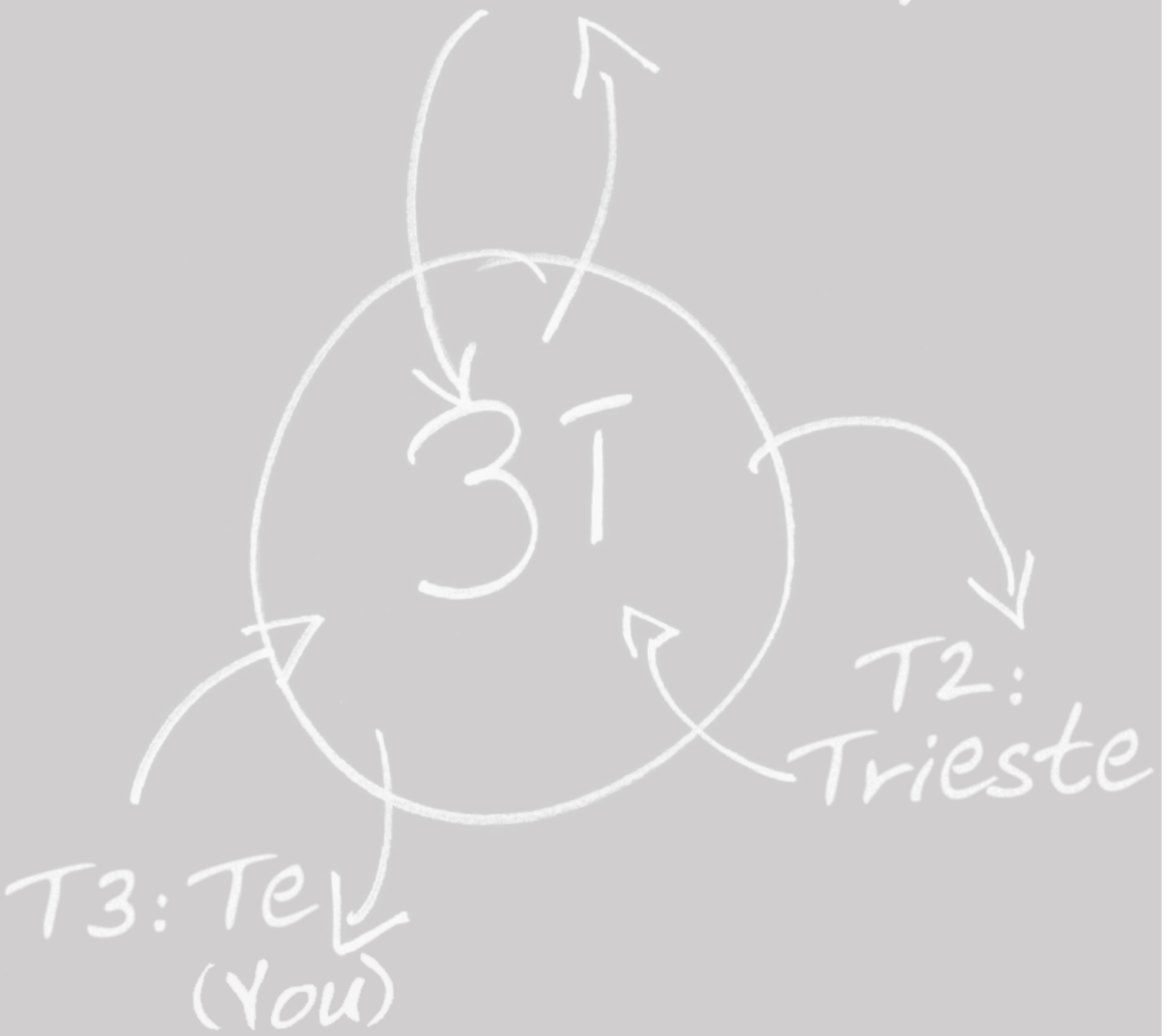


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Innovation: the chicken, the egg and the environment

Over the course of 30 years, 140 institutions, hi-tech firms and research centres have been based in the Park. Some have gone out of business (a fact of life), others have expanded and relocated their facilities, others still have stayed the course. All have shared their results with the world. And they continue to do so.

Thousands of scientists, researchers, businessmen and research and innovation managers have worked at AREA Science Park in Trieste's Karst region, successfully developing and delivering new ideas to both the market and end clients alike. Their work is welcomed by many, well beyond the confines of the Science Park. Though often difficult to quantify, the end result clearly extends across a number of areas: growth of knowledge, image, motivation and economic and occupational returns to name but a few.

These areas are difficult to assess because before science becomes an integral part of our daily lives, it must become technological and brings tangible innovation in terms of products and processes and methods and services. In turn, innovation can only come about when science and technology are within the reach of companies as the earliest possible opportunity, only then can it be distributed on the market and valued by the end client. It is the entrepreneurial system that transforms new knowledge into success for the stakeholders.

An important aspect to be considered in this context is that efforts to launch a real innovation on the market are generally of a greater or much magnitude than what the capital outlay and brainpower by scientists and researchers. It therefore follows that, where at the beginning, the success of the innovation is dependant on new knowledge, it is the businessman's role that becomes vital in subsequent phases: an excellent idea combined with an inadequate businessman will have little or no impact on the economic reality. Naturally, the opposite is also true: there is no such thing as a businessman who can turn a bad idea into gold.

But even a first-rate businessman may not be sufficient. To use a metaphor, the essence of the problem is clear: first you need the egg, then the right chicken to incubate it. And when the chick finally hatches, you need the right environment for it to grow healthily and vigorously. If everything falls into place, the egg, the chicken and the environment share in the success. The same applies to innovation. Its success depends on the new idea and on finding the right businessman and the ideal location where a company can be a step ahead of its competitors.

Success, when it comes, is shared by all. It cannot be divided up and handed out with pharmaceutical precision.

AREA Science Park and its chicks

In our case, it's all about motivating AREA Science Park companies and research centres to involve potential clients and other stakeholders, as early as possible, in contributing to the promotion of research results that are fast becoming innovation. Hence the idea for this publication to illustrate 2008 results, taking into consideration the repercussions on what we shall call 3T:

- Territory (Italy and in particular, the Friuli Venezia Giulia region)
- Trieste (and, by extension, the communities and bodies of the Territory)
- You (the individual citizen).

The 3T are not passive subjects in terms of innovation. On the contrary, they can be key “levers” for the success of a new product, due to their contributions in the initial phases or by acting as test-subjects prior to the product's market launch.

For this to be true, certain basic principles must be considered:

- technological research is only meaningful if it produces results that translated into product, process, method and service innovation
- innovation only makes sense if launched on the market with services, quality and costs that are deemed acceptable by users
- the path, from research results to innovation_in_use (almost a single word), is little known and given scant consideration by researchers. With the current culture of research and its evaluation, researchers are often of the belief that their work is done when the results are published
- the human and economic resources required for industrialisation, distribution and sales are normally greater or much greater in magnitude than those required for research
- the success of an innovation on the market not only depends on technological innovation, but on organisation, operational, distributive and other innovation. Thus, the innovation requires a company whose functions are innovative across the board, or have at least been adapted to the required effort
- the more backing an innovative company has from its local area, the greater the repercussions and returns on its success.

By backing from the local area, we mean the different types of contributions that may arise from 3T. Such backing is vital in the development phases of innovation_in_use, which also involves testing prototypes, developing pre-series or demonstration systems, industrialisation and market launch. The territorial “lever of public demand” is of particular importance (2T: Region, communities and bodies of the Territory)

The benefit for the 2T may be increased:

- knowledge of current innovative phenomena allowing focused development policies
- the image of an innovative region that stands apart in a strategic area and is backed by alliances with complementary partners
- motivation for business and research, which could promote the appeal of new installations
- economic and employment returns resulting from the dimensional, qualitative and relational growth of companies and institutions in the local area.

What strategies should be adopted for a virtuous path?

In AREA Science Park's experience, there are three actions to pursue over and above all else:

- focus technological research on results
- anticipate research and industry links insofar as possible to promote the transformation of results into innovation_in_use
- communicate the results to the 3T to obtain their contribution.

3T contributions are different for different stages of innovation. At AREA, the innovation process has been broken down over three 3 levels:

- potential "early bird" innovation: research results, not only from a scientific and technical standpoint, but also that of business analysis. Primary support, to which AREA may also contribute, involve promoting links between innovators and companies that can best promote the innovation on the market and, where this is not possible, facilitate the creation of spin-offs or start-ups
- "to be" potential innovation, relating to results that are already at advanced industrialisation phase with one or more companies. The contribution involves providing assistance in selecting the most promising markets and in facilitating synergies in the conquering of such markets
- real or "in market" innovation, namely products that the businessman has already launched on the first markets. In such cases, support must be provided for market consolidation and growth, for diversification of the innovative product and for the development of range, etc.

This publication presents the range of innovative AREA Science Park results for 2008. There are 56 products classified under the three levels of innovation as outlined above.

We hope that 2008 at AREA Science Park will be remembered for these results and that in upcoming years such results will be extended to and further improved by capable businessmen, the region and its bodies and...by YOU.

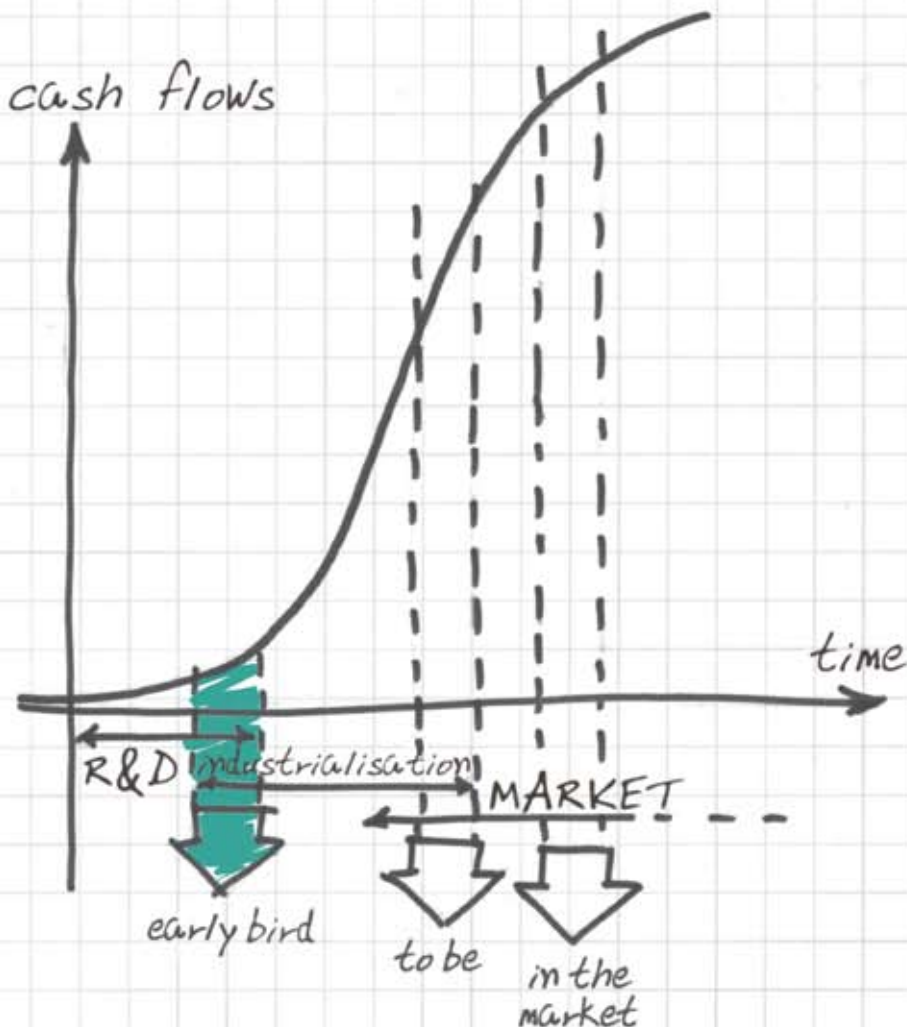
Ing. Giancarlo Michellone
Presidente AREA Science Park

**2008
INNOVATION
3L/3T**


AREA Science Park Results


Innovation in nuce - Innovation Early Bird

Research results that are yet to be industrialised, but are promising in terms of market, company, industry, territory and end user impact.



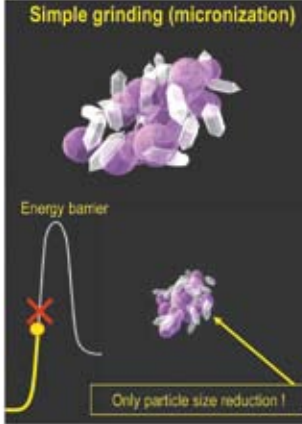
Multi-composites Camexin and Flogowin

		
Company: Actimex Srl Activity: Innovative multicomposite materials for improving bioavailability of natural bioactives for the nutraceutical, cosmeceutical and veterinary fields. R&d and production for own trademarks –actiscience product lines- and on-demand for clients.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
●		
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	●

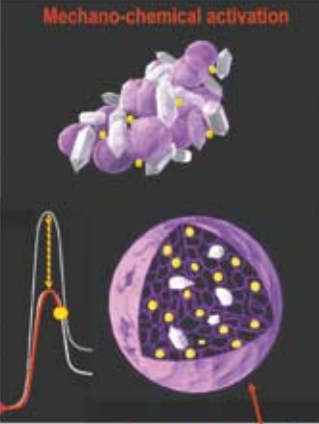


ACTIMEX-TECHNOLOGY

Simple grinding (micronization)



Mechano-chemical activation



Camexin is a multi-composite material containing a *Camelia sinensis* (green tea) extract, rich in antioxidant catechins, treated together selected excipients with Actimex' patented technology (WO/2003/09701 and WO/2007/009997) of mechanochemical activation.

Flogowin is a multi-composite material containing an extract of *Boswellia serrata*, rich in boswellic acids, treated together selected excipients with Actimex' patented technology (WO/2003/09701 and WO/2007/009997) of mechanochemical activation.

In both multi-composites, the chemical characteristics remain unaltered but physico-chemical properties such as solubility, bioavailability and stability are improved.

Advantages

Patented, eco-compatible technology that improves the performance of natural bioactives.

Camexin has been shown to be several times more effective in boosting anti-oxidant activity than the native extract. The innovation will allow the launch of special product lines through pharmacies, for market niches such as hair loss or onychopathies, without neglecting purely anti-oxidant properties.

On account of its marked anti-inflammatory properties, Boswellia is used as an adjuvant in articular inflammation. Actimex is developing its own line of adjuvant products (**Golafash**) in the niche sector of treatment of oral inflammation.

Patents

Title: Co-grinding process for the preparation of a ternary composition

Number: WO /2003/097012

Inventors: F. Carli, P. Corvi Mora, T. Canal

Title: Composition containing micronutrients with improved anti-oxidant activity and the use thereof

Number: WO /2007/009997

Inventors: P. Corvi Mora, T. Canal, F. Fortuna, F. Ruzzier

Fields of application

- Dietary/food supplement
- Cosmetics


Market

Pharmacies

For further information please contact

Actimex Srl
+39.040.3757850 _ info@actimex.trieste.it _ www.actimex.it

AlphaReal K-ras

		
Company Activity: Alphagenics Diaco Biotechnologies Srl Diagnostic and prognostic analysis kits based on molecular techniques for applications in the fields of virology, bacteriology, parasitology and mycology, molecular genetics and oncology.		
Early Bird	Innovation To Be	Innovation in the Market
●		
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



Mutational analysis of codons 2 and 13 of the **K-ras oncogene** via qPCR (to qPCR specification).

A gene is a DNA sequence that encodes a protein with a specific function on an intra or extra cellular level. The chemical, physical and biological properties of a protein are determined by its amino acid composition (amino acid sequence), that is in turn determined by the nucleotide sequence that forms the gene that encodes the protein. A change in the amino acid sequence of a protein (mutation) may modify its biological properties. An oncogene (e.g. k-ras) is a gene linked, whether alone or in association with other genes, to the onset or progression of tumours following alteration of its sequence, involving mutation. The resulting mutated protein loses its physiological function and can no longer control the cellular processes it is involved in. Our test looks for specific section mutation (codons 12 and 13) of the k-ras oncogene, which alter function. This is possible through a technique known as allele specific qPCR (quantitative PCR).

The process allows an extremely large number of copies of the sequence section in question (codons 12 and 13) to be obtained by amplification (multiplication) of the section, that can then be studied in detail and compared to a similar section of non-mutated k-ras as a control.

Advantages

Treatment with cetuximab, a direct monoclonal antibody and EGFR (epidermal growth factor receptor, whose activity is also regulated by the k-ras oncogene) inhibitor, increases survival and disease-free progression while maintaining an acceptable quality of life in patients with colorectal cancers that are non-responsive to conventional chemotherapy.

The mutation status of the K-ras gene in tumour cells may influence the response to treatment with cetuximab. Patients with mutated K-ras gene tumour cells do not benefit from the treatment, while those with no mutation have shown sensitivity to the medicinal product.

It therefore follows that the mutational analysis of codons 12 and 13 of said oncogene is a determining factor in therapeutic management. The direct DNA sequencing of exon 2 is the most frequently used protocol, despite the high equipment and manpower costs. This method allows the identification of mutations where at least 20% of tested cells are mutated.

Alphagenics has developed an innovative alternative method which is simpler, faster and more sensitive, based on the use of qPCR specifications, which has shown considerable success in terms of sensitivity (0.01% of mutated cells), specificity and reproducibility. The mutation status of the K-ras gene in codons 12 and 13, including mutations that have to date been more frequently identified with 98% coverage, can be established in quantitative terms in just two hours.

Fields of application

Current

Assessment of the mutation status of the K-ras gene in patients with colorectal cancer that is non-responsive to conventional chemotherapy.


Potential

Preliminary genetic test for all patients newly-diagnosed with colorectal cancer, to determine the presence of k-ras mutation. This would allow the best therapy to be tailored to the patient at an earlier stage, and the avoidance of futile treatment with potentially serious side effects in more seriously ill patients. This would allow better use of resources within the national health system.

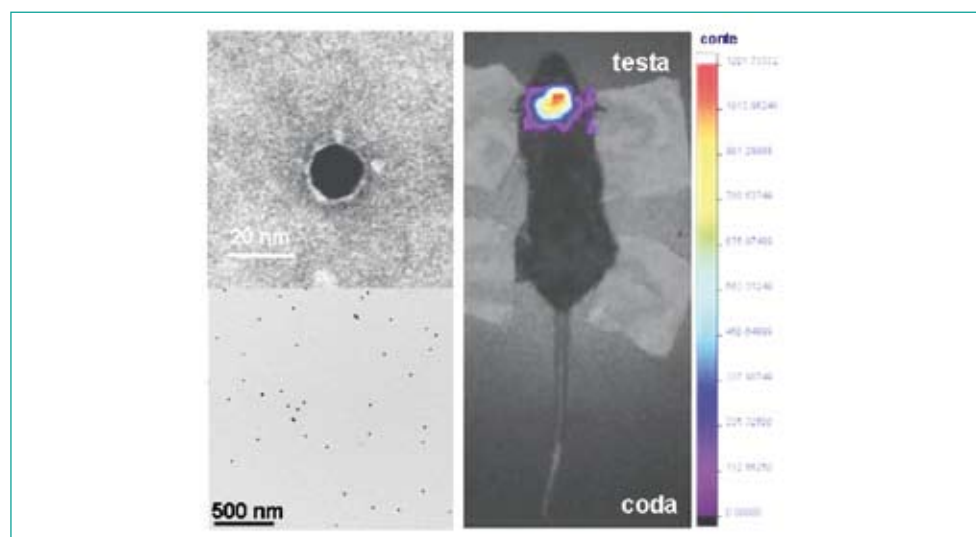
For further information please contact

Alphagenics Diaco Biotechnologies Srl
+39.040.3755680 _ alphagenics@alphagenics.it _ www.alphagenics.it

Nanogold Particles

		
Company Activity		CBM – Consortium for the Centre of Molecular Biomedicine Management of the technology district of molecular biomedicine in Friuli Venezia Giulia, a regional system promoting innovation based around a network of research centres, companies, funding bodies and service structures with the objective of promoting intellectual property stemming from scientific research, attracting leading companies and creating cutting-edge companies. CBM studies, researches and supports the growth of new technological entrepreneurship in the fields of oncology, vascular cardiology, neuroscience, hepatology and regenerating medicine.
Innovation Early Bird	Innovation To Be	Innovation in the Market
●		
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	

The nanogold (diameter 15 nm) functionalized using the protocol described have shown long-term stability in a non-aggregate form (on the left under electronic microscope). The highest concentration is noted in the brain (shown in red in the picture to the right) 19 hours after injection into the caudal vein of a rat.



Nanogold particles encapsulated by polyelectrolytes delivered through the blood-brain barrier.

Advantages

The blood-brain barrier controls access to the central nervous system of substances circulating in the blood. While providing a vital protection mechanism, the barrier can nevertheless prevent access to drugs. A number of strategies exist to improving the delivery of drugs through the barrier. They include boosting the hydrophobic properties of molecules or breaking the barrier itself. Each strategy has disadvantages. For example, modification of the molecules may reduce their effectiveness, while forcing entry to the brain may increase the risk of inflammation.

CBM has developed a technique to bind creatine – a molecule that can alleviate the complications of cerebral lesions – to nanogold coated with human serum albumin. Such nanoparticles have demonstrated a noteworthy ability to breach the blood-brain barrier and deliver drugs to the central nervous system.

Patents

Title: Polyelectrolyte binding of nanogold based delivery through the blood-brain barrier.

Number: EP08425351

Protection status: Patent pending

Countries where patent is in place: Italy, Europe, currently being expanded internationally.

Publication

Viota J. L., Mandal S., Delgado A. V., Toca-Herrera J. L., Möller M., Zanuttin F., Balestrino M., Krol S. (2009) Nanogold based drug delivery through the blood brain barrier: Probing HSA and creatine binding by electrophoresis. JCIS, 332, 215–223.

Sectors of application

Drugs for the treatment of stroke and other neurological disorders such as encephalitis and epilepsy.


Market

Pharmaceutical industry

For further information please contact

CBM - Consorzio per il Centro di Biomedicina Molecolare Scarl
+39.040.3757703 _ info@cbm.fvg.it _ www.cbm.fvg.it

Biophenolite

		
Company Activity CimtecLab Srl New polymeric composite and nanocomposite materials, functional analysis of composite materials.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
●		
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	

From fruit, to the laboratory reactor and high performance material.



Biophenolite is a line of new products derived from bio-renewable resources for polymers. CimtecLab has developed a series of new products derived from cardanol, an oily alkylphenol obtained by the distillation of CNSL (Cashew Nut Shell Liquid), a by-product of the food-processing industry that is widely available in India and Brazil. Drawing on a series of original and economic synthetic protocols, CimtecLab can produce the following range of chemicals for the polymer industry, with the potential to replace petroleum-based polymers:

- Novolacs (cross-linking of epoxy formulas)
- Epoxy novolac resin (for high performance epoxy formulas)
- Epoxy monomers (reactive thinners for epoxy formulas)
- Acrylic monomers (reactive thinners for UV reactive formulas)
- Amines (cross-linking agents for bi-component epoxy systems)
- Polyols (polyurethane formula components, in particular of polyurethane foams for thermal insulation)
- Benzoxazine (cross-linking agents for epoxy systems)
- Aril-phosphates (flame retardant additives)

The principal properties of cardanol (resistance to thermal, mechanical and chemical action, and to fire) are passed on to its derivatives, which are thereby highly suited to industrial processing and subsequent market roll-out.

Advantages

- Environmental: as non-petroleum derivatives, the products are more eco-friendly.
- Economic: with the greater price stability of the raw product and synthesis reaction design, production costs are significantly lower
- Ethical: all products derive from non-edible waste from the food industry
- Practical: cardanol is easily converted into a wide range of products.

The competitive advantage of CimtecLab compared to its two competitors on the world market (Cardolite Inc, Palmer int.) comprises primarily in:

- the availability of a broader, more versatile product range
- the experience and organisation of production and marketing by its industry group (Cimtec Holding).

Sectors of application

Current

The most immediate sectors of application for cardanol derivatives are:

- Thermoset polymers and fibre reinforced composites (novolac, novolac epoxy, epoxy monomers, cross-linking amines). These derivatives provide a response to specific requests from Indian producers seeking to purchase know-how and develop joint ventures
- Paint and wooden furniture industry (acrylic monomers for UV paints)
- Polyurethane industry (polyols for thermal insulation foam for construction and car parts)
- Resin manufacturing industry, especially in India and Brazil
- Synthetic and natural reinforcement fibre (benzoaxazine as sizing agents).

Potential


New functionalisation of cardanol is being studied to develop a flame-retardant plasticizer additive, to be used primarily in the electrical cable sector made using thermoplastic polymers such as PVC and EVA.

Additional new applications will be identified on the back of results as they are achieved and in response to requests from partners or clients.

For further information please contact

CimtecLab Srl
+39.040.3755447 _ info.trieste@cimteclab.it _ www.cimteclab.it

Storage cells

		
Company: Elcon Elettronica Srl Activity: Electronic devices and systems for industrial automation applications and the automotive, avionic and space sectors.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
●		
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	●

The **Storage Cells** were developed for use in solar panel heating systems, particularly those using performance panels.

Advantages

The storage cells can store great quantities of heat even at high temperatures (greater than 100°C) in limited volumes and at limited cost. The heat can be “extracted” for use at night or on cloudy or on less sunny, colder days.

When applied to ground coil systems, the cells minimize the use of methane or fuel oil for heating and electricity for cooling.

The R&D project is led by internal company resources in collaboration with Trieste university and a PhD student in nanotechnology who will develop the “material” part over the next three years.

Fields of application

Current

Low yield, high volume, critical function water storage systems are currently in use.

New storage cells under development have the potential of replacing earlier systems and of being essential components for systems with near zero consumption of traditional energy sources.

Potential

Heating and cooling of public, industrial residential and other buildings

Market***Current***

Foreseeable, global impact due to the significant savings in energy consumption.
Main customers: heating system fitters, individuals and construction firms

Potential

Use in industry through the production of excess heat for third party resale.

For further information please contact

**Elcon Elettronica Srl
+39.040.3755502 _ info@elcon-elettronica.com _ www.elcon-elettronica.com**

Genprostaticprofiler

		
Company EuroClone SpA Activity Diagnostic assays based on molecular and immunological techniques (ELISA) for the rapid detection of chemical contaminants in food and veterinary diagnostics.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
●		
Innovation for the Territory	Innovation for Trieste	Innovation for You
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Diagnostic in vitro prostate cancer kit



Genprostaticprofiler is a molecular test used for expression profile analysis of a pool of eight prostate cancer genes, equipped with data processing software.

Advantages compared to the state of the art and the competition

Gene analysis results allow doctors to understand whether the individual is developing the pathology and also allows them to identify predisposition and thereby make a predictive diagnosis.

Patents

Title: Method for identifying neoplastic change, with particular reference to prostate cancer.

Number: 05 801 263.4-2402 (granted)

Countries protected by the patent: Italy, Europe

Fields of application

- Cancer Care Centres and Specialist Hospitals
- Pathological Anatomy Laboratories.

Market

Prostate cancer is the most common type of tumour in men after melanoma. In Italy, 300,000 prostate needle biopsies are performed each year, indicative of the potential market.

For further information please contact

EuroClone SpA
+39.040.3755411 _ info@euroclone.it _ euroclone.ts@euroclone.it _ www.euroclone.it

Anti-counterfeiting furniture microchip

		Company Activity	GME (General Micro Electronics) Srl Electronic devices and systems for domestic automation.
Innovation Early Bird	Innovation To Be	Innovation in the Market	
●			
Innovation for the Territory	Innovation for Trieste	Innovation for You	
●	●	●	

 <p>The microchip (which is as small as a nail) is inserted into the item of furniture</p>	 <p>The chip records information on the item of furniture</p>
 <p>The microchip reader can connect to the web and transmit the information</p>	 <p>The item of furniture can be sent to a select location for cross checking</p>

The **furniture microchip** is a micro-electronic recognition system that is added to product during or after production. It provides the guarantee of an original product and is a safe means of combating illegal reproduction.

The microchip contains a section for the electronic recording of the product phases, from production through to distribution.

The manufacturer can be identified by (as an example of recordable data):

1. Manufacturer website	7. Model name
2. Product code	8. Description (laminated, solid, veneered, lacquered wood and aluminium)
3. Weight	9. Colour (neutral, white, colours ...)
4. Date of manufacture	10. Lacquering (matt, polished, metallic)
5. Stock	11. Model number
6. Product name	12. Photo

Advantages

- Data volume can be stored
- Different text can be stored
- Single text that cannot be overwritten
- Tamper proof label
- Small dimensions, just a few mm thick
- Quick to read
- Reliable reader information
- Unique chip that is virtually impossible to copy
- Easily applied to furniture
- Easy to use with handheld reader
- Shock and dirt resistant
- Easy data exchange via the chip reader.

Fields of application

Current

Anti-counterfeiting

Potential

Security against theft prevention

Market

A preliminary version was showcased at the InnovAction fair in Udine, where product feedback was received from foreign furniture factories whose product lines are often copied, and who could benefit from this system which allows the identification of counterfeit furniture sold, even if fake.


The product has already been produced and operates via contact reading, where the microchip data reader must be positioned above the microchip.

A remote reader is, also, being developed (early bird). It will therefore be possible for microchip data to be read from a distance of over three metres.

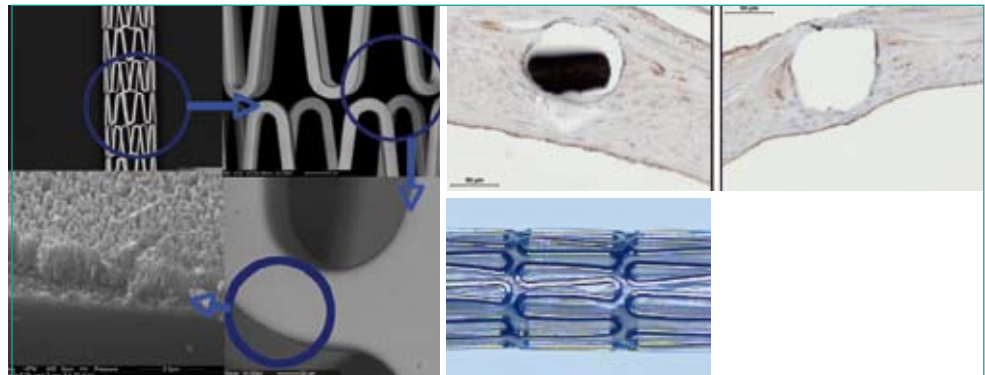
For further information please contact

GME Srl
+39.0434.640556 _ info@gmesrl.it _ www.gmelab.com

MAR-Tyⁿ

 International Biomedical Systems			Company IBS - International Biomedical Systems SpA R&D and production
			Activity Biomedical cardiovascular system devices (coronary stents), image acquisition, processing and transfer systems for medical applications.
Innovation Early Bird	Innovation To Be	Innovation in the Market	
●			
Innovation for the Territory	Innovation for Trieste	Innovation for You	
●	●		

Animal study: Uncoated stent Coated stent



MAR-Tyⁿ is a cobalt-chromium L605 alloy coronary stent with TiN (Titanium Nitride) coating that is preassembled on a rapid exchange Delivery System. The coating is applied via the CFUBMSIB (Closed Field Unbalanced Magnetron Sputtering Ion Beam) method.

Thanks to the innovative nanostructured ceramic coating, MAR-Tyn stents guarantee the perfect compatibility of the device in perfect symbiosis with the artery and guarantee superior performance in the short term by repairing the artery, and in the long term, by reducing potential rejection problems to a bare minimum.

The nanostructured coating of the MAR-Tyn stent was developed using sophisticated technology, developed in collaboration with the National Research Council (CNR), 'Istituto di Scienza dei Materiale Ceramici' in Faenza and the AMRI at Northumbria University in Newcastle (UK), and produced by deposition process with a new machine developed in collaboration with Genefinity Srl, a University of Trieste spin-off.

MAR-Tyn stents are developed for use in Percutaneous Transluminal Coronary Angioplasty (PTCA), in the event of coronary occlusion or coronary stenosis, to allow recanalisation of the vessel and restoration of blood flow while the innovative coating guarantees advanced biocompatibility.

Advantages

- Highly biocompatible surface for faster, atraumatic reendothelization.
- Reduced risk of reaction to the implanted device (thrombosis)
- Smooth, uniform coating once the stent is expanded
- Reduced inflammatory response
- Reduced ionic release
- Reduced restenosis
- Increases resistance to corrosion and device life
- Controlled microporosity with potential application for medicinal product release.

Patents

Title: Coated stent manufacturing method

Number: 1.342.532

Granted on: 09/11/2007

Application of: 15/10/2003

Countries protected by the patent: Italy, Europe, USA and certain Asian countries.

Fields of application

Interventional Cardiology

For further information please contact

IBS - International Biomedical Systems SpA
+39.040.3755641 _ info@ibsmmed.it _ www.ibsmmed.it

Cacao swollen shoot virus (CSSV)

			Company Activity International Centre for Genetic Engineering and Biotechnology (ICGEB) ICGEB is an international, inter-governmental organisation established as a centre of excellence for research and training in the fields of genetic engineering and biotechnology, with particular attention to the needs of developing countries. In line with its mandate, ICGEB has developed a policy on the use of intellectual property rights, which provides that access to such rights, deriving from the Centre's research results, must be guaranteed to member countries and non-member, developing countries pursuant to current international conventions. The work of the Biosafety Outstation in Ca'Tron where the invention was conceived is financed by the Cassamarca Foundation.
Innovation Early Bird	Innovation To Be	Innovation in the Market	
●			
Innovation for the Territory	Innovation for Trieste	Innovation for You	
●	●		



Plant expressing the **Cacao swollen shoot virus genome (CSSV)**.

The Cacao swollen shoot virus is a type of Badnavirus that infects only the cocoa tree and few related tree species, such as Baobab and Cola. Other, Badnaviruses that are phylogenetically related to this virus infect plants of significant importance to tropical agriculture, such as banana, sugar cane and pineapple plants.

Advantages

The CSSV virus is notoriously difficult to study, a fact reflected in the absence of consistent literature on the subject. In fact, until now the state of the art contains no effective treatment for CSSV infection. In addition, no plant model is yet available for the development of therapeutic instruments for the prevention and treatment of CSSV-infected plants.

The current invention provides a method for the creation of transgenic plants that are not normally host to the virus, including the CSSV genome.

These plants provide an effective model for the study of the Badnavirus infection and of CSSV in particular, and allow the development of a resistance strategy for plants subject to infection by such viruses.

Patents:

Title:	Transgenic plant that expresses the Cacao swollen shoot virus (CSSV) genome
Number:	RM2008A000396
Protection status:	Patent pending
Date of filing:	21 July 2008
Countries protected by the patent:	Italy

Fields of application

Current

Research in the field of plant virology


Potential

Agriculture – in particular, the invention will allow the development of strategies to combat the Badnavirus virus in plants such as banana, pineapple, sugar cane and cocoa

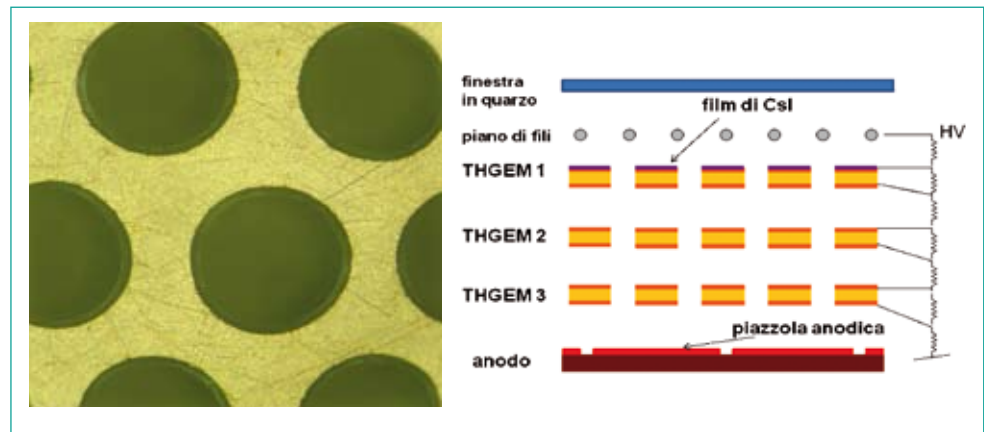
For further information please contact

ICGEB - International Centre for Genetic Engineering and Biotechnology
 +39.040.37571 _ icgeb@icgeb.org _ <http://www.icgeb.org/relazioni-con-le-imprese.html>

THGEM-based gaseous detectors

		
Company INFN		Activity Research on nuclear physics, and on elementary particles and their fundamental interactions; particle detectors, microelectronic data acquisition and management devices and calculation and network technologies.
Innovation Early Bird	Innovation To Be	Innovation in the Market
●		
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	

THGEM's detail



Gaseous detectors based on THickGEM (THGEM) electron multipliers. THGEM multipliers are printed-circuit boards (PCB), which are typically perforated with sub-millimetric diameter perforations drilled at regular pitches of the order of 1 mm intervals. Applying a suitable voltage difference between the two faces of the PCB, a strong electrical field is generated. In a gaseous atmosphere, this allows the acceleration and the multiplication of the electrons produced in the gas by the passage of an ionizing particle. A CsI film is deposited on the surface of the first THGEM layer of a multi-layer structure, so as to create a reflective photocathode.

Advantages

Gas photo-detectors have, in the past, allowed an economic response to the need of equipping vast surfaces with devices that can detect photons, even on an individual basis.

The state of the art comprises multiple wire proportional chambers (MWPC) coupled with a solid state photocathode (CsI): this is the first equipment in which a solid state photocathode can successfully operate in a gaseous atmosphere. The performance of these detectors is limited by the return flow of the ions generated in the electronic multiplication process that bombard the photocathode resulting in electrical instability of the detectors and aging of the photocathode itself.

THGEM's detail

The new generation gas photodetector is engineered to overcome the limitations of previous technology through its innovative design, which limits the return of ions to the photocathode.

Fields of application

Current

Imaging Cerenkov counters for nuclear physics, particle and astroparticle applications. Indirectly, these developments permit application advances in other ionized particle detectors in basic physics (calorimetry and plotters).


Potential

The development of THGEM ionized particle detectors are likely to be applied in the field of national security, where there is a requirement for large surface detectors at moderate cost.

For further information please contact

INFN – National Institute of Nuclear Physics – Trieste Branch
+39.040.3756220 _ infn@ts.infn.it _ www.ts.infn.it

MUV

		Company Microglass Srl	Activity Microwave machinery for drying materials in industrial process through an innovative, electro-radiation process.
Innovation Early Bird	Innovation To Be	Innovation in the Market	
●			
Innovation for the Territory	Innovation for Trieste	Innovation for You	
●	●		



MUV is a UV lamp switching device.

Advantages

Muv is a high power electronic device for switching on UV lamps. Offering advanced efficiency and a sweeping adjustment range, Muv reduces energy consumption in the production cycle by at least 40% and guarantees longer lamp life thanks to the high frequency feed that prolongs the life of the electrodes. From a construction standpoint, the solutions allow optimal integration with PLC-based control systems, due to the numeric management of feed parameters and the native serial interface that is compatible with most common industrial systems. Weighing up to 50% less than traditional transformer-based power supply and thyristor adjustment systems, it generally requires less space within the electrical panel. Muv guarantees the technological advantages of uniform irradiation and accurate power adjustment, which translates into product quality.


Market

To the best of the company's knowledge, there is currently no research underway in Italy focusing on developing this technology. On an international level, certain multinationals manufacture gas discharge lamp ignition equipment. Some also make similar electronic systems, but the performance of their products is inferior. Microglass market potential therefore extends across all utilities that use industrial UV lamp treatment systems (for instance, for industrial processes involving resin polymerisation, binders and ink and painted surfaces such as wood, plastic or glass).

For further information please contact

Microglass Srl
+39.0434.963211 _ info@microglass.biz _ www.microglass.biz

Eye Box – RFID recognition device for the blind and the visually impaired

		
Company Activity Proposita Sas Software systems for organised large-scale distribution and production, processing, tracking and sales process support in the food sector and particularly on mobile devices with RFID and GPS technologies.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
●		
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



Eye Box enables the blind and the visually impaired to classify and recognise household objects using RFID technology, in particular foodstuffs that are difficult to identify, such as tins, frozen products or medicines.

The user interface depends on the supports normally used by the user and can consist of a Braille keyboard or a voice synthesizer with voice recognition system.

Advantages

- Low cost and can interface with existing systems
- Use of innovative but standard technology.

Fields of application

Current

The blind and the visually impaired

Potential

Senior citizens, Healthcare



Market

Associations for the blind and the visually impaired, large-scale distribution (for the provision of services to blind customers) and homecare service companies.

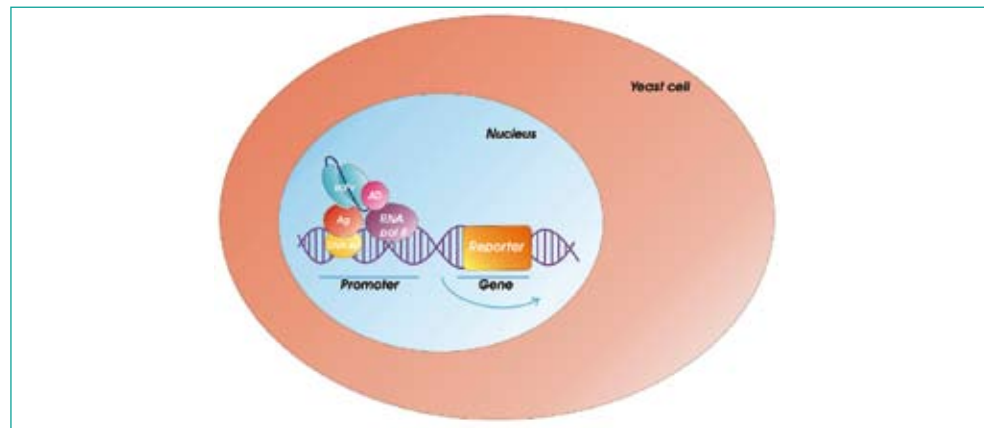
For further information please contact

Proposita Sas
+39 040 375 5391 _ arealab@proposita.it _ <http://www.proposita.it>

SPLINT

 		Company Rottapharm Biotech Srl	Activity Research and development of therapeutic agents based on recombinant antibodies for the treatment of various diseases, including diseases affecting the osteoarticular system.
Innovation Early Bird	Innovation To Be	Innovation in the Market	
●			
Innovation for the Territory	Innovation for Trieste	Innovation for You	
●	●		

Key: SPLINT is based on fusion products comprising two polypeptides, one that encodes an antibody and the other that encodes an antigene, which interact one with the other and two functional halves of a transcription factor. The eukaryotic transcription factors that activate gene expression are formed by two domino factors, one interacting with the DNA (DNA-BD), the other an activator (AD). The interaction between the two exogenous polypeptides (antigene and antibody) reassembles the transcription factor which can interact with the promoter allowing the expression of two reporter genes, one of which comprises of one gene that allow the growth of yeast on a selective level, while the other comprises of a chromogene enzyme.



SPLINT is a platform for the rapid selection of high stability and selectivity recombinant antibodies. The technology allows the isolation and selection of intrinsically stable antibodies from various murine and human libraries. It produces recombinant antibodies aimed at targets of specific pharmacological interest for use as therapeutic, diagnostic or research instruments.

Advantages

Completely independent platform as regards other technology currently on the market (e.g. phage display). SPLINT's strengths over its competitors are:

- Rapid selection, which occurs directly from DNA sequences, without any need to express the antigenic protein (from gene to antibody)
- System economy and versatility
- Highly robust, specific system
- Personalised libraries.

Patents

Title:	SELECTION OF INTRACELLULAR IMMUNOGLOBULINS
Inventors:	T SE, E. (GB), RABBITS, T.H. (GB), CATTANEO, A. (IT), VISINTIN, M. (IT).
Number:	Publication No W000/54057
Countries protected by the patent:	Italy, Europe, USA, other countries

Title:	METHOD OF IDENTIFYING A CONSENSUS SEQUENCE FOR INTRACELLULAR ANTIBODIES
Inventors:	CATTANEO, A. (IT), MARITAN, A. (IT), VISINTIN, M. (IT), RABBITTS, T.H. (GB), SETTANNI, G. (IT).
Number:	Publication No W003/014960
Countries protected by the patent:	Italy, Europe, USA, other countries
Title:	INTRABODIES AGAINST THE ONCOGENIC FORM OF RAS
Inventors:	RABBITTS, T.H. (GB), TANAKA, T. (GB).
Number:	Publication No W004/046186
Countries protected by the patent:	Italy, Europe, USA, other countries
Title:	INTRACELLULAR ANTIBODIES
Inventors:	RABBITTS, T.H. (GB), TANAKA, T. (GB).
Number:	Publication No W004/046185
Countries protected by the patent:	Italy, Europe, USA, other countries
Title:	METHOD FOR IN VIVO IDENTIFICATION OF INTRACELLULAR EPITOPES
Inventors:	CATTANEO, A. (IT), VISINTIN, M. (IT).
Number:	Publication No W002/035237
Countries protected by the patent:	Italy, Europe, USA, other countries
Title:	METHOD FOR ISOLATING INTRACELLULAR ANTIBODIES ABLE TO NEUTRALIZE PROTEIN INTERACTIONS
Inventors:	VISINTIN, M. (IT), CATTANEO, A. (IT).
Number:	Publication No W004/046192
Countries protected by the patent:	Italy, Europe, USA, other countries

Fields of application

Current

SPLINT is currently a solid technology used in the antibody market, a sector that continues to post solid, positive growth trends. Therapeutic antibodies (approximately \$30 billion) and diagnostic antibodies are the most important segments in terms of size and because they present a yet unfulfilled need. The SPLINT libraries are so diverse that antibodies against almost any target protein are available. Human SPLINT are the perfect tools for isolating latest generation therapeutic antibodies, SPLINT mouse also have improved characteristics for application in the diagnostic field. The sector of antibodies for use as research tools, though not as extensive, is a further market segment where SPLINT technology can satisfy demand.


Potential

Antibodies isolated by SPLINT can also be expressed as intrabodies and as such they already represent a powerful and versatile instrument for obtaining protein inactivation in cellular systems. A potential future goal is to develop new approaches for the application of intrabodies in gene therapy for certain diseases, especially in the fields of oncology and infectious diseases.

For further information please contact

Rottapharm Biotech Srl
+39.040.3756503 _ rottapharm.biotech@rottapharm.com _ www.rotta.com/en/index.html

Environmental Monitoring Station

		
Company Sincrotrone Trieste SCpA – Elettra Synchrotron Light Laboratory Activity Basic, applied and pre-competitive national and international research on biological structures, on the structure of solids and dynamic phenomena occurring on surfaces, superconductors, metal structures and composite materials.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
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Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



Environmental monitoring station that uses X ray fluorescence for the real time identification of chemical species in PM10 fine dust.

The idea of developing this innovative product sprang from analysis conducted in collaboration with A.R.P.A. – the Provincial Department of Trieste, and with the Trieste branch of the Legambiente Association, for the study of certain atmospheric particulate filters from monitoring stations in the city.

The analyses, conducted with synchrotron light using different spectrometric techniques, have revealed that X ray fluorescence is the most suitable method to be transferred within an environmental monitoring station.

The prototype monitoring station can collect particulate in the same way as conventional stations, plus it can provide spectroscopic analysis in real time. It has been developed with the help of Friuli Venezia Giulia Commissioner Government “Fondo Trieste”.

Advantages

The station developed by Sincrotrone Trieste, produces real time results that until now could only be obtained via laboratory analysis. The environmental monitoring PM10 fine dust is currently restricted by law to the single measurement of total weight by unit of volume. Seldom, another method is used, which is based on mitigating beta radiation emitted by a radioactive source and absorbed by material deposited on the sampling filter.

Nevertheless, neither type of station is able to immediately identify the components of polluting dust, which can only be identified via spectroscopic analysis once the particulate has been collected by specially equipped laboratories.

Fields of application

Current

Environmental monitoring

Potential

The possibility of onsite chemical recognition of PM10, offered by the instrument herein described, technically overcomes current legislation and permits the potential opening of a successive pre-normative study phase with better defined and more selective standards.

Sincrotrone Trieste currently collaborates with the Agenzia Regionale per la Protezione dell'Ambiente Ligure (ARPAL) to monitor the environmental situation in Liguria. This will allow to begin the experimentation of the new station developed by the laboratory.

For further information please contact

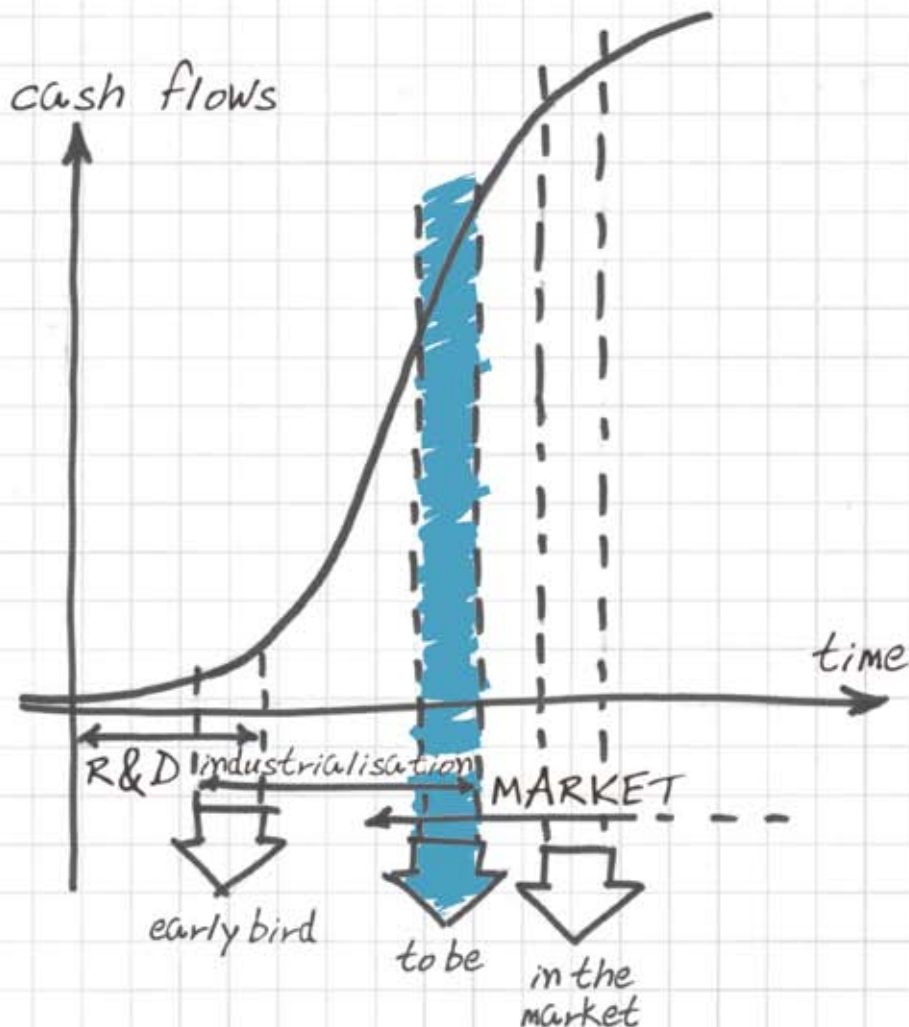
Sincrotrone Trieste SCpA – Elettra Synchrotron Light Laboratory
+39.040.3758056 _ ilo@elettra.trieste.it _ www.elettra.trieste.it

**2008
INNOVATION
3L/3T**


AREA Science Park Results

Innovation To Be

The innovation is (almost) industrialised and is now ready for the market: the innovation is ready to be launched or is in the process of being launched on one or more high-potential markets.



Rhodiodes

		
Company Activity: Actimex Srl Innovative multicomposite materials for improving bioavailability of natural bioactives for the nutraceutical, cosmeceutical and veterinary fields. R&d and production for own trademarks –actiscience product lines- and on-demand for clients.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
	●	
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	●

Rhodiodes in the launch phase of Rodiogen, Studium and Mivaben



Rhodiodes is a multi-composite material containing an extract of *Rhodiola rosea* treated together selected excipients with Actimex' patented technology (WO/2003/09701 and WO/2007/009997) with mechanochemical activation.

Its chemical characteristics remain unaltered, but physico-chemical properties such as solubility, bioavailability and stability are improved.

Rhodiodes has been shown to be 10 times more effective than the native extract in increasing the production of ATP in neuron cell tests. The innovation has led the way for the market launch of 3 product lines containing Rhodiodes, with especially devised synergic formulae to meet particular needs in specific market niches.

In **Rodiogen**, the adaptogenic properties of Rhodiodes are synergized by 3 specially devised "energy recovery" formulations:

- Saline Rodiogen: in sachets, with mineral salts, in particular magnesium, potassium and zinc, to relieve physical and mental fatigue
- Rodiogen Sport, a dietary supplement for sports persons, containing mineral salts, fructose and maltodextrin to replenish the body after periods of intense physical activity

- Rodiogen VIT, for adults and children, where the adaptogenic properties of Rhodiodes complement vitamin supplementation.

In Studium memory, the adaptogenic properties of Rhodiodes are synergized with micronutrient substances, including Ginkgo biloba and Vitis vinifera (antioxidant) extracts treated with the same technology, that are valuable for memory and concentration and are involved in the transmission of nervous impulses.

In **Mivaben**, the adaptogenic properties of Rhodiodes are synergized with useful extracts that “naturally enhance mood”.

Advantages

Patented, eco-compatible technology that improves the performance of active ingredients.

Patents

Title: Co-grinding process for the preparation of a ternary composition

Number: WO /2003/097012

Inventors: F. Carli, P. Corvi Mora, T. Canal

Title: Composition Containing Micronutrients with Improved Anti-Oxidant Activity and the use thereof

Number: WO /2007/009997

Inventors: P. Corvi Mora, T. Canal, F. Fortuna, F. Ruzzier

Fields of application

Dietary/food supplement

Cosmetics

Market


Pharmacies

For further information please contact

Actimex Srl

+39.040.3757850 _ info@actimex.trieste.it _ www.actimex.it

Amped Five

		
Company Activity Amped Srl development of systems for the analysis, processing and enhancement of images and videos for investigative, forensic and intelligence applications.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
	●	
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



AMPED FIVE is a software application designed to speed up and enhance image and video analysis in the investigative and forensic field. While most image processing software on the market can only process professional, high-quality images and videos, FIVE optimize the amount of information retrieved by manipulating and analyzing low quality images from CCTV, mobile phones, internet downloads and any other source.

Incorporating complex mathematical algorithms, FIVE improves image quality to reveal details that would otherwise be impossible to decipher, thus providing a solution to increasing demand for the extraction of material that can be used in investigations, even from low quality sources. This feature, combined with speed and ease of use, provides astonishing results. It is now possible to gather information for investigations that would otherwise be lost and for forensic scientists to achieve what previously only possible in TV fiction, namely to reconstruct particular facial features or crystal clear license plates from “non-viable” image fragments.

FIVE combines, in one single product, all image reconstruction processes that have until now been confined to the research field, due to the introduction of new processing methods specially developed for situations typically encountered in the course of an investigation.

The system supports more image and video formats than any other product available on the market and combines different processing filters extremely rapidly thus allowing a large number of tests to be conducted in a negligible timeframe, with optimal results.

Another outstanding characteristic of FIVE is its automatic reporting feature, which delivers a full technical-scientific processing description and is an invaluable tool for judicial proceedings.

Advantages

- Numerous processing algorithms for resolving a wide range of issues
- Compatibility with any image or video format
- Court-approved certified processing procedures
- Innovative work flows enable multiple filters to be rapidly linked and configured with ease.

Fields of application

Current

Forensic, investigative, intelligence, safety, infrastructure and public institutions.

Potential

Mass media, film restoration, scientific imaging (biology, astronomy, etc.)

Market

Current

The software is already used by a number of forensic investigation experts on an international level and by private security firms.


Potential

Adoption of a single investigation support tool: Amped's aim is for Five to become the global benchmark for all security-related multimedia processing needs. Its infrastructure can also be adapted for any other sector where there is a requirement for advanced multimedia processing. This assumes the potential creation of similar products for different types of application (such as scientific visualization or any kind of image or video restoration) or the creation of new, similar products, again in the field of security, as instruments for the restoration of audio recordings or for the classification of images or events.

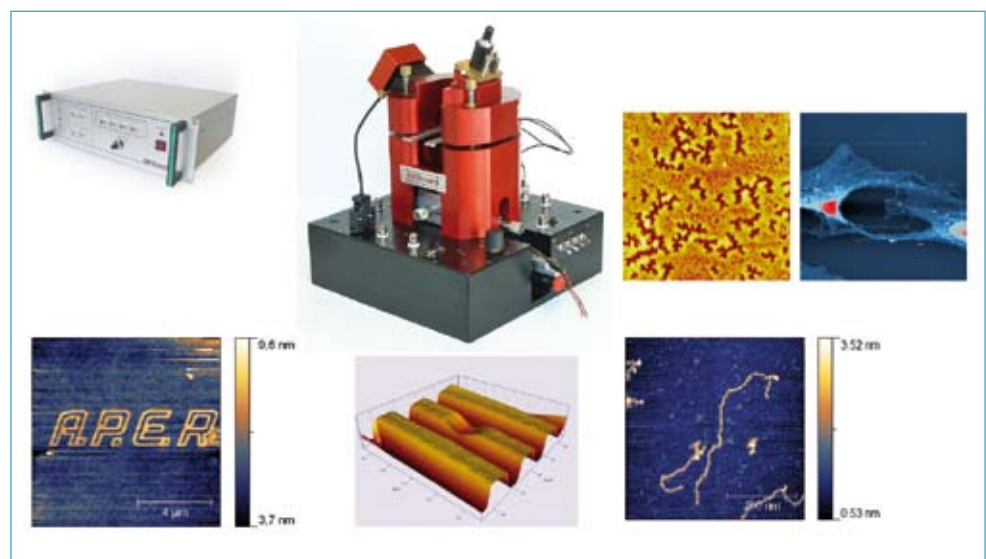
For further information please contact

Amped Srl
+39.040.3755333 _ info@amped.it _ www.amped.it

Nanolithography System

		
Company: A.P.E. Research Srl Activity: High resolution microscope for biological and biomedical applications, scientific instrumentation for spectroscopic surface analysis.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
	●	
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	

Nanolithography System
(Nanolithographic tool
integrated in A100-SGS AFM).



Nanolithography System is an innovative nanolithography tool that has been integrated in our A100-SGS AFM (Atomic Force Microscope).

AFM is the basic tool for nanotechnology research and is part of the scanning probe microscopy family, a class of high resolution microscopes (from nanometer to Angstrom), which allow 3D topographic reconstruction of the both the sample surface and its individual atoms. With its integrated nanolithography system, the AFM microscope allows direct interaction with the sample and manipulation of individual molecules or atoms (nanomanipulation). The microscopes can also operate in gaseous or liquid environments and do not require preliminary specimen preparation. They are therefore particularly suited to the study of both inorganic matter and biological specimens.

Advantages

The Nanolithography System was developed and optimised for high-precision nanolithography with outstanding versatility.

The instrument has an absolute scanning system, equipped with positioning sensors (Strain Gauge), which guarantees high precision, superior flatness and accurate repositioning on the sample.

With the nanolithographic tool it is possible to make nanoscratching or AFM nanolithography by Local Anodic Oxidation (LAO). It comes with special software for managing any path towards designing, manipulating or moving an object on a nanometric scale, drawing it directly (through precise movements of the probe) or importing an external image file.

Fields of application

Current

Currently, the atomic force microscope is used primarily in the morphological characterisation of surfaces. Its original fields of application remain prevalent, and are surface physics, material science and chemistry. More recent, expanding sectors of application are biology and biomedicine, although mainly within the field of the research laboratory.

Potential

The potential in terms of nanomanipulation and chemical characterisation of this class of instruments has not yet been fully exploited. The current expansion of nanotechnology reflects confidence in the increasing dissemination of AFM, particularly in industry, and is not only as a microscope for the vision of the sample surface, but also and above all as an instrument for the study of the chemical and physical properties of individual molecules and of nanomanipulation.

For further information please contact

APE Research Srl
+39.040.3757905 _ infos@aperesearch.com _ www.aperesearch.com

Nanofos e Nanoftal


		
Company CimtecLab Srl Activity New polymeric composite and nanocomposite materials, functional analysis of composite materials.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
	●	
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



Figure 1
Intumescent behaviour during a cone calorimeter test.

NANOFOS E NANOFTAL are new flame retardant nanometric additives. CimtecLab researchers were the first to study the so-called LDH (Layered-Double Hydroxides), a new class of halogen-free lamellar mixed hydroxide-based nano charges offering advanced flame retardant performance. From its experience in the synthesis and use of these nano charges, CimtecLab's NANOFIRE Division will launch the following types of products on the market in 2009. These products are currently available in sample form:

- NANOFTAL: phthalate-based plasticizer additive containing LDH nanoparticles
- NANOFOS: phosphoric plasticizer additive containing LDH nanoparticles.

In the latter product, the synergy between LDH and the phosphoric additive heightens the flame retardant properties of the nano particles (Patent EP 1469034A1). Compared to micrometric additives, the superior efficiency of NANOFTAL and NANOFOS additives on flame retardant mechanisms derives from the following characteristics:

- The nano dispersed lamellar structure acts as a thermal insulator and physical barrier to gases. The steam released absorbs some of the combustion heat and dilutes the gas.
- Particular organic modifying agents are selected, which induce intumescent behaviour in the nano charge, due to the formation of non-combustible gas produced by pyrolysis of the modifying agent.
- synergetic effect of the flame retardant mechanisms of LDH combines with that of traditional phosphorous base flame retardants.

Advantages

The main advantages of NANOFOS and NANOFTAL compared to conventional micrometric additives are:

- Reduction in the use of heavy metal oxides
- Improved flame retardant action: low concentrations (3 - 5%) of nano-additives are sufficient
- Low opacity and toxicity of fumes
- Multi-functional action: additives have plasticizer, anti-acid and flame retardant properties

- Preservation of the mechanical properties of the polymer compared to conventional blends
- Stability: No migration of the additive over time
- Inertia of the nano particles.

There are currently no similar liquid flame retardant additives on the market.

Similar nano particles are only available in powder form. The powders are difficult to integrate in the production process s they only disperse after considerable effort and lengthy wait times during extrusion, which makes them unpopular with producers of thermoplastic compounds.

Fields of application

Current

Thanks to nano particle predisposition, the excellent fluidity and synergy with phosphoric carriers, the nano charged liquid additives NANOFTAL and NANOFOS can be used as follows:

- Primarily in the thermoplastic polymer sector, particularly in the production of electrical cables, as dual function plasticizer and flame retardant additives.
- In the thermosetting resin and ready-to-use products industry, both in the fabrication of flame retardant composites and sacrificial topcoat.

Potential

The use of NANOFOS and NANOFTAL masterbatches can extend to other thermoplastic polymers that require combined plasticizer and flame retardant properties.

With a view to creating new product lines, CimtecLab has entered into collaboration with ITRI – International Tin Research Institute (UK), with the goal of developing new “hybrid” nanometric additives that is synthesized additives combining LDH chemistry with tin composites (stannates and hydrostannates). The new additives will be pre-dispersed in readily available carriers and in the new cardanol-based plasticizer currently being developed at the CimtecLab laboratories.

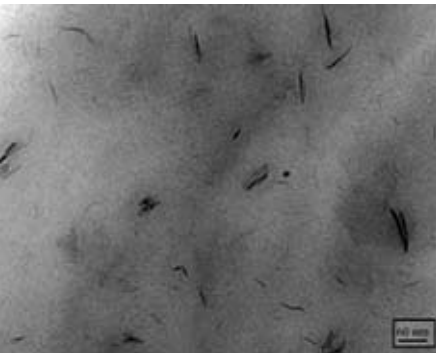



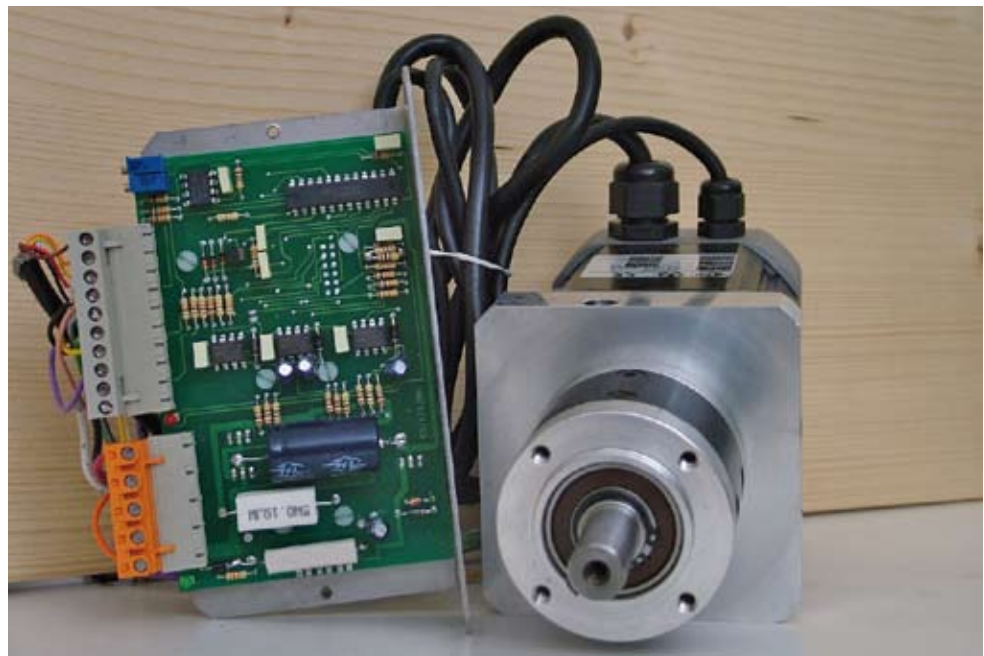
Figure 2
Thermoset polymer LDH lamellar exfoliate.

For further information please contact

CimtecLab Srl
+39.040.3755447 _ info.trieste@cimtecLab.it _ www.cimtecLab.it

Ecodrive

		
Company Activity: Elcon Elettronica Srl Electronic systems and devices for industrial automation, automotive, avionic and space sector application.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
	●	
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



Ecodrive, is a low-voltage electrical propulsion system for the leisure boating sector. Low energy consumption and high performance at a competitive cost. Ecodrive uses a brushless motor and compact motor control to move 5-6 metre vessels.

Can be powered by lithium batteries, which two to three hours of battery use.

It can also be connected to solar panels to increase battery power or to recharge the batteries.

It integrates a man overboard electronic safety device and an immobilizer that prevents the device from being reutilised in the event of unauthorised sale on the spare parts market (following theft).

Advantages

Low cost, easy to use and compact in size (similar to an outboard motor), this is a valuable and interesting instrument.

It can be fitted to a range of different powered engines and can also be configured as an inboard motor, with considerable increase in power. With average consumption of one third of current applications, Ecodrive has a definite ecological advantage. It is equipped with a suitable propeller to avoid water turbulence and reduce environmental impact.

A pair of propellers (two motors) increases craft manoeuvrability.

The low maintenance systems makes it even for cost effective.

Fields of application

Current

Devised for nautical use, the system can be exported to other sectors such as battery-run winches (for the construction of houses in the open countryside with no power supply) and small concrete mixers.

Potential

The technology is also effectively used in the circulation of city cars and scooters in limited access urban areas, for forklift trucks, escalators, lifts, and wheel chairs for the disabled (reduction in weight and increased efficiency).

Market

Current

- Pleasure craft shipyards or manufacturers of motor systems to be disconnected from the electricity network
- Indoor goods handling, hospital and factory trolleys.


Potential

City vehicles, battery-run engines requiring lower fuel consumption.

For further information please contact

Elcon Elettronica Srl
+39.040.3755502 _ info@elcon-elettronica.com _ www.elcon-elettronica.com

Stem Cell

		
Company EuroClone SpA Activity Diagnostic assays based on molecular and immunological techniques (ELISA) for the rapid detection of chemical contaminants in food and veterinary diagnostics.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
	●	
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	

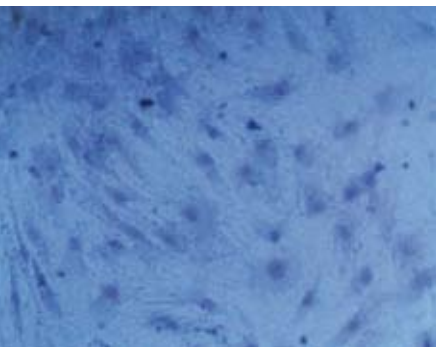


Figure 1
Mesenchymal stem cells
cultivated in Euroclone
medium.

Euroclone has developed the following stem cell culture mediums:

- Selective culture medium for the growth of hematopoietic stem cells
- Selective culture medium for the growth of mesenchymal stem cells
- Selective culture medium for the growth of mouse embryonic stem cells
- Culture reagents for adipocyte stem cell differentiation.
- Culture reagents for chondrocyte stem cell differentiation.
- Reagents for osteocyte stem cell differentiation.

Advantages

- Standardisation of stem cell preparation
- Methods for repeatable use
- Sterile products
- Ready-to-use culture medium for hematopoietic stem cells.

Fields of application

Current

- Research in the cellular biology sector
- Tissue transplant (in animals)
- Transplant of bone marrow cells.

Potential

- Autologous and allogenic transplant (skin, myocardial cells, hepatic cells, cornea).

Market

- European research market - 2007: EUR 45 million
- US research market - 2007: EUR 86 million
- World market 2010 forecast for clinical use: EUR 707 million.

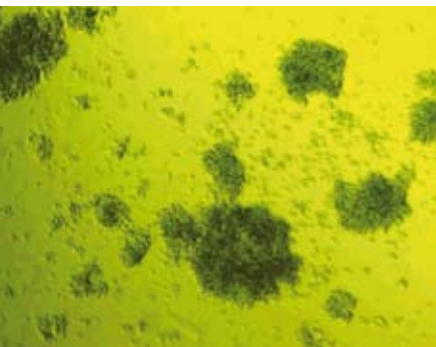



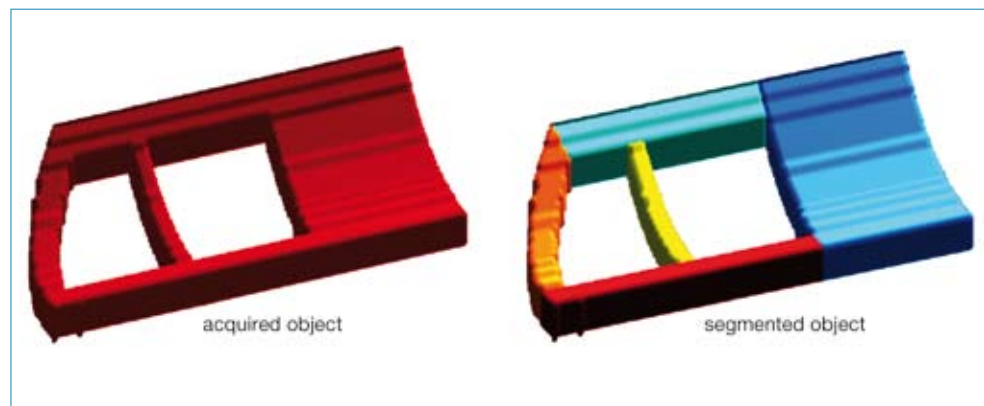
Figure 2
Hematopoietic stem cells
cultivated in Euroclone
medium.

For further information please contact

Euroclone SpA
+39.040.3755411 _ info@euroclone.it _ euroclone.ts@euroclone.it _ www.euroclone.it

Casper

		
Company Activity Glance Vision Technologies Srl - SISSA spin-off. Advanced image processing software and Computer Vision solutions. System integrators.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
	●	
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



Casper is a contour and surface partitioner. Given a binary, two or three dimensional image representing one or more objects, Casper is able to separate each object into primitives.

Primitives can be regarded as building blocks that is the basic parts that constitute the object. An example of its application is to be found in surface treatments such as automated painting systems, where Casper separates the item to be painted into a series of rectilinear, curvilinear, surface, front and edge primitives, which are then sent to an industrial robot.

Advantages

Many devices based on different technology can acquire 2D or 3D images of objects in a range of operating conditions. Image analysis is, however, far from simple and traditional software, based on the comparison of a given image and a sample or model must be reprogrammed each time the model changes or when new models are added.

Casper analyses rather than comparing. There are currently no market products for the robotics industry with this feature.

The primary advantage is the flexibility guaranteed by the processing system. There is no requirement for the acquisition of CAD models. The system “sees” an object, interprets on the spot and transmits the information to a robot or to the device which then processes it.

In the case of automated door and window painting systems, there is generally a large number of products, plus new models are constantly added. The robot manufacturer (the primary target for this product) is no longer required to deal with the modelling of objects models and so has a flexible tool that significantly simplifies a basic process phase.

Fields of application

Current

The product has been successfully applied in the paint industry.

Numerous examples of Casper 2D have already been installed and are operational around the world. The 3D version is currently being tested.

Potential

The potential market includes all object surface processes: polishing, cleaning, inspection.

Market

Casper primarily targets manufacturing companies, machine tools and robot manufacturers and system integrators.

For further information please contact

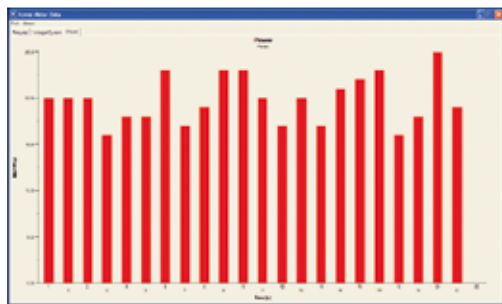
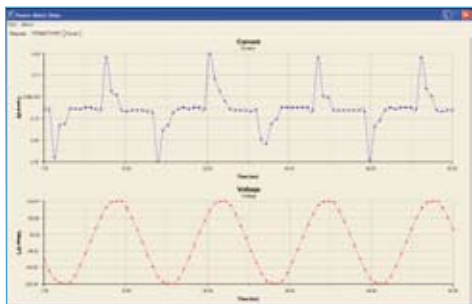
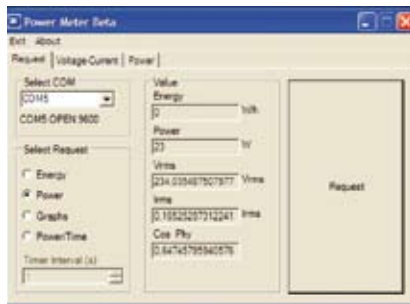
**Glance Vision Technologies Srl c/o SISSA
+39.040.3756559 _ vanzella@gvt.it _ www.gvt.it**

Energy measuring device



Company Gme (General Micro Electronics) Srl
Activity Electronic devices and domestic automation systems.

Innovation Early Bird	Innovation To Be	Innovation in the Market
	●	
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



Energy measuring device engineered to the majority of domotics standards.

The card measures the electrical power absorbed by various types of user, from domestic appliance consumption control to the low voltage systems used in solar panel applications.

The project can be easily implemented depending on use and needs.

All transmission standards (Ethernet, Zigbee, Rs232, etc.) can be integrated with the possibility of internet connection or GPRS cell card connection for transmission from remote locations.

Advantages

Competitive market cost, excellent measurement functions, electrical energy consumption can be controlled via the internet.

Fields of application

Current

Domotics, Energy.

Potential

Renewable energy sources continue to boost demand for measurement systems that monitor the energy produced or to identify areas of higher energy consumption in the home or workplace.

There is now much interest in the saving potential of correct energy use, both in industry and on the consumer market.

Market

Current

Basic versions of the measuring device fitted with a display have been sold to various companies (electronic, alternative energy, electromechanical companies), with outstanding results.

Potential

Thanks to the development of alternative energy technologies, the product is expected to be highly successful, as demand for low cost, precision tools for the measuring energy consumption is on the increase.

GME expects global product sales.

The product can be diversified to all domestic and telecommunication transmission standards.

The product can be applied in accordance with the required reference market (so far requests for a range of uses have been received) and the potential of this product is limited only by the user's imagination.


Single phase, three-phase, DC, AC.

This is a low energy consumption measuring device features and can therefore also be used in fields where power consumption is critical.

For further information please contact

GME Srl
+39.0434.640556 _ info@gmesrl.it _ www.gmelab.com

IV Station™

		
Company: Health Robotics Srl Activity: Robotic systems for the preparation of injectable medicinal products in the hospital sector. Automation and robotic systems for biomedical applications.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
	●	
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



IV STATION™ is an innovative, automated system for the preparation of intravenous medications in a hospital environment.

Based on the company's experience in the use of anthropomorphic robotic arms in the medical field, IV STATION™ introduces the concept of a point-of-care automation solution. Devised for use in intensive care units (surgery, intensive care, cardiology, haemodialysis etc.), integrated with the pharmacological treatment computerised prescription system, IV STATION™ units automatically prepares intravenous medications for hospital patients. The system is compatible with the CytoCare robot (for anti-tumour therapy) and covers a vast array of conventional treatments (antibiotics, painkillers, etc.) with guaranteed safety levels and providing superior reliability over manual management systems, thus promoting patient safety and optimising treatment costs.

The IV STATION™ system incorporates a new generation, 6-axis anthropomorphic arm (the most compact on the market) and is controlled by sophisticated software that doses injectable medicines in syringes and bags of different capacity in a sterile atmosphere according to the medical prescription.

The system incorporates extremely advanced technological solutions, such as the automatic facial recognition of authorised operators, touch screen user interface, and automatic medicinal product, syringe and bag recognition via computer vision.

Advantages

- Extremely versatile (handles all types of 3 ml to 60 ml syringe and 50 ml to 1000 ml bags) Compact in size (1 x 1 x 2m)
- Competitive price (estimated end-user cost of approximately EUR 250,000).

Fields of application

Current

Preparation of conventional injection therapies (antibiotics, painkillers, anti-inflammatories, etc.) for syringe or bag delivery, for immediate administration to hospital patients.

Potential

Use can also be extended to treatment with cytotoxic medicine or to critical manipulation (antiblastic, monoclonal antibodies).

Market

The target market is the same as that of the CytoCare system, while it attracts a much higher number of hospital departments given the range of application of the IV STATION™. The first 12 systems are due to be installed at the below pilot sites for clinical system trials in 2009:

University of Colorado (Denver, USA), University of Texas' M.D. Anderson Cancer Center (Houston, USA), Fairview Pharmacy Services & University of Minnesota Children's Hospital (Minneapolis, USA), Allegiance Health (Jackson, Michigan, USA), Imperial College Healthcare NHS Trust (University of London, UK), Bozen Krankenhaus (Bozen, Italy), Campus Biomedico University Hospital (Rome, Italy), Agean University Hospital (Izmir, Turkey), Dubai Health Authority (Dubai, UAE), Tawam Hospital - Johns Hopkins Medicine Affiliate (Abu Dhabi, UAE), King Faisal Specialist Hospital & Research Centre (Riyadh, Saudi Arabia), Kameda Medical Center (Japan)

Health Robotics has already received orders, via the CytoCare distribution network, for the installation of over 200 IV STATION™ units in the 2009-2010 period.



For further information please contact

Healt Robotics Srl
+39.040.3757837 _ info@health-robotics.com _ www.health-robotics.com

Computer Farm


		
Company: INFN Activity: Research in nuclear physics, on elementary particles and on their fundamental interactions; development of particle detectors, microelectronic devices for data acquisition and data management, calculation technologies and networks.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
	●	
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	

Photo of calculation units at the 80 bi-processor dual core farm



High performance, 80 bi-processor **scientific computer farm** (2 GHz, 16 GB RAM), dual core, rack server completed with Terabyte storage infrastructure and open to GRID access. The system was developed with particular focus on energy saving policies. The advance that led to the creation of the current system dates to 2001.

The purpose of the calculation centre is to provide an optimal structure for data reduction and analysis of fundamental physics experiments, performed by the researcher of INFN Trieste, in collaboration with other Italian and international institutions. Local and remote use (via GRID) is not limited to nuclear and subnuclear physics, also attracting researchers in fundamental physics from other disciplines.

Advantages

The computer farm makes broad use of new generation hardware and software and, thanks to GRID access and a focus on energy saving policies, it was designed in compliance with the most updated sector guidelines. The high degree of component integration also reduces its overall dimensions. These characteristics make it a virtuous and exportable model of a medium sized calculation centre.

Fields of application

Current

Scientific fundamental physics calculation tool.


Potential

Potential for using the computer farm model for scientific applications in other research sectors, in the sharing of databases and software applications of social interest (for example medical diagnostics) and for industrial applications.

For further information please contact

INFN - National Institute of Nuclear Physics – Trieste Branch
+39.040.3756220 _ infn@ts.infn.it _ www.ts.infn.it

Lamir

		
Company Microglass Srl		Activity Microwave machinery for drying materials in industrial process through an innovative, electro-radiation process.
Innovation Early Bird	Innovation To Be	Innovation in the Market
	●	
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



LAMIR
macchine per laminazione del vetro

LAMIR significa:
 uniformità di trattamento
 velocità di riscaldamento
 innovatività del sistema ad irraggiamento infrarosso
 risparmio energetico
 praticità d'uso



Lamir is a glass laminating machine with IR vacuum.

Advantages

Lamir implements two patented Microglass technological solutions for the controlled emission of electromagnetic radiation for the production or generation of precision controlled heating in specific areas to be treated. The technological advantages derive from the technologically innovative construction of the oven. Uniformity of treatment is guaranteed by the radiant, patented surface that emits long wave infrareds which homogenize irradiation, irrespective of the distance between the source and the product.

Microred irradiation system transmit much more heat to the silicon vacuum seal membrane than can be achieved by conventional fan-convectors (which do not even guarantee uniformity of thermal irradiation in the treatment chamber).

The upper and lower rack irradiation systems maintain a following mode for the temperature set by the user to guarantee thermal uniformity of the product during the work cycle. The Lamir oven comes with many other optionals that make it simple to use, manageable and cost-effective.

The huge advantage of Lamir is that glass of varying thickness can be laminated in approximately half the time required by traditional methods. Moreover, Lamir is highly versatile when it comes to custom glass. Coloured, patterned or luminescent films or fabric can be inset, a feature limited only by the imagination. The innovative technological system means that product quality is guaranteed.

Patents

Title: Device for the controlled emission of electromagnetic waves

Number: PN2008A000036

Application of: 12/05/2005

Countries where patent is in place: Italy

Third part transfer: No


Market

The market is potentially huge, as the product targets both end users (glass works) and glass processing machinery distributors.

For further information please contact

Microglass Srl
+39.0434.963211 _ info@microglass.biz _ www.microglass.biz

Telemed System

		
Microsoft		
Company	Microsoft Srl CCAT - Centre for Science and High Technology	
Activity	Competence and technological application centre for Microsoft Italia in partnership with Teorema Engineering, based in AREA since 2006. Striving to be a reference point for the development of projects with a high innovation content providing them with effective technological and in some cases financial support.	
Innovation Early Bird	Innovation To Be	Innovation in the Market
	●	
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



Telemed System is a solution for reducing hospital admissions for cardiac patients requiring daily monitoring and assistance, which may be “managed” in non-critical conditions by remote technological solutions (Software platform+ wireless/gprs/internet + management system + call centres).

The system comprises of three modules:

- TeleMed Box: open system environment software solution (device with Windows XP) for the monitoring of the main vital parameters using apparatus (sphygmomanometer, electronic scales, electrocardiograph, etc.) that is wirelessly connected to the TeleMed Box. The patient can self-monitor vital signs effortlessly.
- TeleMed Data Center: monitoring information coordinating system for receiving safe protocol TeleMedBox transmissions by organising information in such a way that it can be easily used by the medical call centre or by medical staff directly.
- TeleMed Portal: information access and presentation system which allows the accessing of historic data for individual patients, monitoring, medical records and so on. It has an integrated workflow and parameter alert management system, and allows the clinical management and potential diagnosis of the patient.

Advantages

- Total independence as compared to medical devices
- Utilises technology and market standards for easy extendibility of the solution
- Comprehensive functions
- Extremely user friendly patient use, requiring no special skills
- Modular solution
- Available for use on different illnesses that can managed by different Hospital departments
- Integration with the Hospital's existing IT platforms
- Enhances the Hospital's existing infrastructure.

Fields of application

Current

Cardiology: support and monitoring of cardiac patients.

Potential

Potential application in all hospital sectors, particularly where hospital admission times can be reduced.

Market


The system revolutionizes the way care is provided for chronic patients and cardiac patients in particular. The system's projected market and economic impact is enormous as it has implications on the cost of medical assistance (hospital admission), which is of critical importance at this time.

The solution is currently aimed at cardiac departments but it is ready for application in relation to the most common diseases. Moreover, markets of potential interest include remote medical assistance, shipping and certain disadvantaged areas.

For further information please contact

Centre for Science and High Technology
+39.040.3757999 _ sales@teorema.net _ www.teorema.net

Sharescience

		
Company Promoscience Srl Activity Integrated data and knowledge management software systems for technical-scientific dissemination and communication.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
	●	
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	

Sharescience is a web platform for Current Research Information, with effective Content Management technology and offers an information structure designed around the communications needs of Research Departments and Groups. It has been launched on the market as a product that is particularly suitable for promoting the activities, abilities and results of universities and research organizations.

Sharescience supports and optimizes:

- Scientific communication: Sharescience is the first Content Management System designed and developed to offer researchers at universities and research institutes maximum visibility and the valorisation of results
- Quality and research dynamics assessment: Sharescience is an effective support tool for research content management
- The dissemination of innovation and technological transfer: Sharescience increases the dissemination of ability and innovation, promoting the establishing of new links between research and industry.

The user-friendly Sharescience allows researchers to publish information in the following technical areas:

- Abilities and know-how: staff and CVs of its members
- Publications: articles, conference proceedings, manuals
- Activities and results: projects and possible application of results
- Intellectual property: patents and licences
- Documents: multimedia presentations, posters, training material
- Equipment and technology: research and analysis techniques, instrumentation
- Collaboration and financing: academic and business partnerships
- News and events: conventions, seminars, journal clubs, workshops and conferences.

Fields of application

Universities and research organizations. Industrial Liaison Office. Development and territorial promotion bodies.


Market

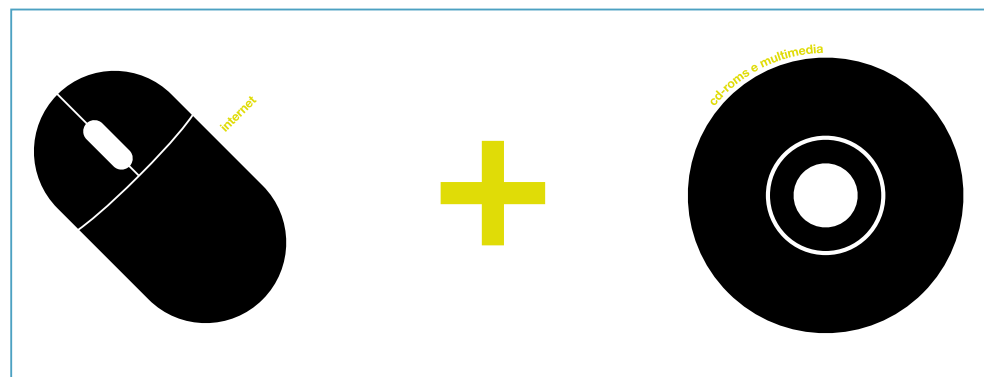
Universities, national and international research bodies.

For further information please contact

Promoscience Srl
+39.040.3755690 _ info@promoscience.com _ www.promoscience.com

Caliban

		
Company: Prospero Srl Activity: Multimedia products and data transmission services for scientific exchange and internal and external communication.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
	●	
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



Caliban is a software tool for the creation of multimedia catalogues to be distributed on physical media (CDs, DVDs, USB flash drives) that can then be content updated via the web.

Advantages

Caliban creates multimedia catalogues (CDs, DVDs) that can on the one hand channel very “bulky” content in terms of file size (and therefore desktop applications in the strict sense of the word), and on the other act as a client-server application, in that when there is a network connection, the application connects to the server to work on the remote data base and update the local copy.

Caliban can be used to:

- Conduct complex research within the catalogue
- Maintain desktop application performance
- Have a continuously updated catalogue without redistribution costs
- Be fully operational even when there is no network connection.

Fields of application

Current

Caliban is currently used by an important supplier of products and ICT services.

Potential

Caliban is aimed at all companies that need to promote their product/service catalogue. In particular, Caliban was devised for furniture and interior decor manufacturers and for producers/distributors of technical materials who need to frequently update their catalogue and who often need to access the catalogue at the premises of the end client, even where there is no network connection.

Market

Current

So far the product has only been promoted in the ICT sector.

Potential


Caliban will be marketed among leading Italian furniture and interior décor manufacturers.

A Caliban art application is currently being researched, due to the increasing number of artists and art galleries who want to create a digital catalogue of their works and who will need to update such catalogues at a reasonable cost.

For further information please contact

Prospero Srl
+39.040.3755580 _ info@prospero.it _ www.prospero.it

Habut

		
Company Sigea Srl Activity Synthesis and development of biomaterials to be used in the cosmetics and medical device industries.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
	●	
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



The visco-elastic nature of these compounds means that their rheological behaviour can vary from viscous to plastic

The HABUT Family of compounds, a hyaluronic acid derivative that is covalently modified via an original, patented synthesis, is the most highly researched family of molecules.

The entire process, from synthesis developed on a pre-pilot scale to purification and recovery was conducted by adopting technical innovations. The structural characterisation draws on high-tech analytical instrumentation (Nuclear Magnetic Resonance, IR spectroscopy, rheology).

Advantages compared to the state of the art and the competition

Performance studies conducted by authoritative nationally and internationally acclaimed institutes (Ronzoni Institute - Milan, ISPE- Milan, Callerio Foundation in Trieste) have revealed the greater effectiveness of these compounds as compared to other compounds available on the skincare market. The process is cost-effective and yields advanced results, making it more attractive than previous synthetic approaches.

Patents

- 1) "Butyric esters with antiproliferative activity and the pharmaceutical compositions containing them" – PCT No: EP9706589
- 2) "Butyric-formylic blend esters of polysaccharide acids, their preparation and use in skincare" – PCT pending IB20070039
- 3) "Derivates from polysaccharide acids" - PCT pending MI2007A2237

Countries where patent is in place: Italy, Europe, USA, other countries (4)

Third party transfer: No

Fields of application

Current

Skincare and medical devices.

Potential


- Pharmaceutical applications in the skincare sector, particularly for stressed skin lacking tone
- Post-surgical applications for tissue repair
- Visco-elastic solutions for the treatment of articular alterations.



For further information please contact

Sigea Srl
+39.040.3755460 _ bosco@sigea.biz

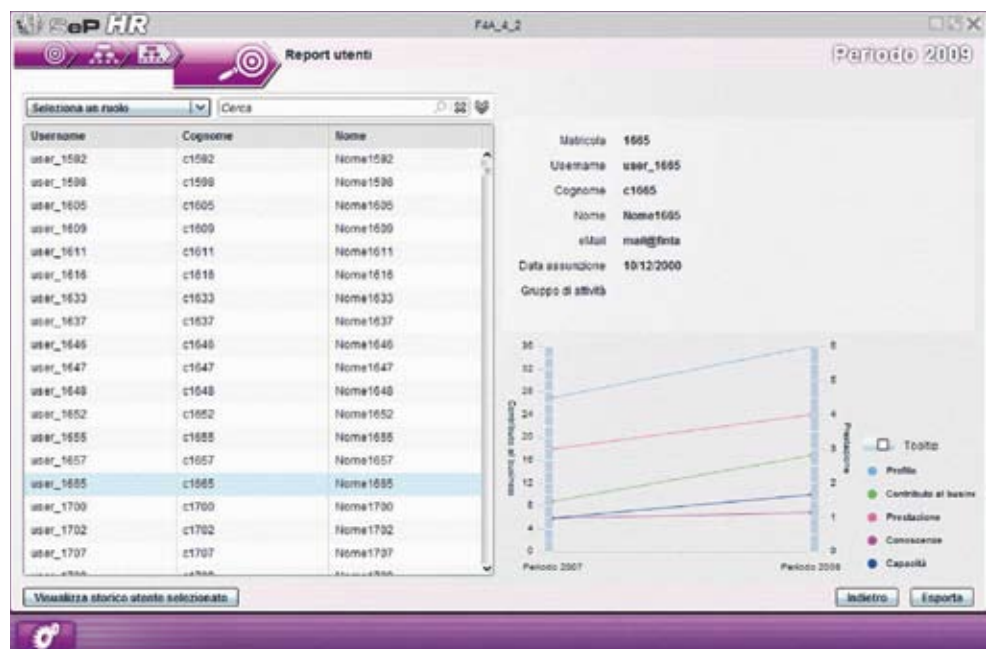
SEP HR® Human Resources to Objectives



Company: Simulware Srl

Activity: Web-based interactive technology and solutions for marketing, distance learning and business communication.

Innovation Early Bird	Innovation To Be	Innovation in the Market
	●	
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



SEP HR® is the new Simulware skill mapping software. The system measures and monitors the targets reached and the skills of company staff, enhancing know-how and strengthening career paths. And there is more. Managing multiple assessment sessions, SEP HR® traces the development of an individual's skills over time and plans the staff member's development within the Organization coherently with allocated business and skill objectives. This promotes the definition and acceptance of more global and interfunctional process objectives and that are no longer strictly linked to their department.

SimulwareProfessional® + SepLive® + SKS® + SEP HR®

The SimulwareProfessional® platform was devised and constructed in modular form offering the Client a high level of scalability and customisation. The direct link between the modules and between SEP HR® and the Simulware platform in particular, allows different content to be hosted, from web based training to videos, from traditional

classroom to virtual classroom sessions. The platform also allows training and information activities to be managed in line with the relevant HR requirements and deadlines and with the Organisation's policies and language.

Advantages

The main advantages of SEP HR® consist in the application of logics and instruments typically used in e-Learning to manage objectives and skills for the company workforce. SEP HR® was designed to broaden the Learning Management System concept, extending the scope of learning solutions and simplifying its management through the use of a single system with upstream and downstream flows as follows: mapping the job description, defining objectives by area of responsibility or by profile, assessment, creation of personal development plans, monitoring training activity, identifying gaps and reviewing results and efficacy, for continuous growth and development. Management skills are essential for improving performance, but effective management demands control and accurate control demands a means of measurement. The set of indicators has therefore been developed on the basis of the Client's competitive pillars, characterising monitoring on all levels based on objectivity, completeness, absolute ease of interpretation and calculation speed. The objectives must be translated into Key Performance Indicators, as instruments for assessing performance and the relative failure or success compared to improvement adjusted to short, medium and long term objectives.

Fields of application

SEP HR® strengths include its flexibility and modularity, which allow a high degree of customisation even for very diverse organisations. Moreover, compatibility with LMS SimulwareProfessiona® and with the SKS® solution allows the creation of any type of multimedia content at any stage of the skills management process, even offline. SEP HR® adapts to all HR phases, from recruitment to hiring, the integration of new recruits in the workforce to the normal resource management process through to talent and career management for certain profile brackets.


Market

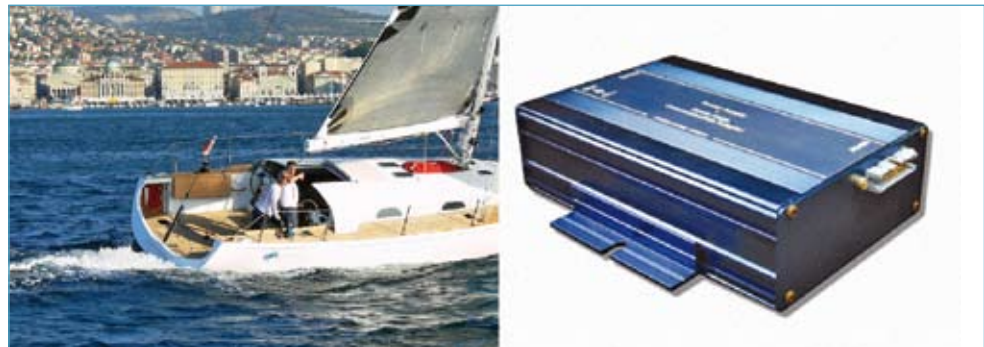
SEP HR® has been devised to offer an already sensitive market, an integrated company know-how management system, capable of managing both assessment and performance assessment stages as well as training management to support skill development processes. In this context, Simulware intends to extend its offer to top consolidated clients for whom it is a point of reference in the provision of training and in the transfer of skills. Moreover, the new system, integrated with the platform, also allows medium-large companies to be approached, offering a system that puts forward a complete assessment and skills transfer path with enormous competitive advantage. The objective is to promote transversal action through the development of LEADERSHIP within the Company and a need for the continuous measurement of performance by aligning instruments such as STRATEGY ORGANIZATION, OPERATIONS and above all PEOPLE. We believe these to be the three fundamental drivers for improved performance and are certainly the most closely and interdependently linked. The features of SEP HR® make it a system that can be easily integrated with existing assessment and resource processes and consolidated within organisations.

For further information please contact

Simulware Srl
+39.040.3757860 _ info@simulware.com _ www.simulware.it

Strain gauge reader

			Company	Sincrotrone Trieste SCpA – Elettra Synchrotron Light Laboratory	
			Activity	Basic, applied and pre-competitive national and international research on biological structures, on the structure of solids and dynamic phenomena occurring on surfaces, superconductors, metal structures and composite materials.	
Innovation Early Bird		Innovation To Be		Innovation in the Market	
		●			
Innovation for the Territory		Innovation for Trieste		Innovation for You	
●		●			



The SG350QB2 is a strain gauge reader able to measure and monitor in real time - easily and with submicrometric resolution - solid surface strains.

The device connects up to a maximum of 32 modules for a total of 64 strain gauges at a sampling rate of 40 measures a second (with 32 modules). This way, it is possible to obtain in just a few simple steps a “measurement point network” of the monitored surface.

Advantages

Compared to conventional systems (consisting of an amplifier and analogue-digital converter), signal acquisition and its digital conversion are obtained through a single integrator thus optimising performances in terms of the speed and quality of the measured data.

Fields of application

Current

Boat strain analysis.

Mirror strains monitoring on a synchrotron radiation beamline.


Potential

Material fatigue stress analysis (metal, wood, plastic).

For further information please contact

Sincrotrone Trieste SCpA - Elettra Synchrotron Light Laboratory
Industrial Liaison Office _ +39.040.3758303 _ ilo@elettra.trieste.it _ www.elettra.trieste.it

Petra

		
Company Synaps Technology Srl Activity Innovative electronic devices for safety applications in the access control and intrusion detection fields.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
	●	
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	●



Petra is a new Personal Safety solution based on innovative positioning, communication and monitoring technologies. It has two components: Petra and Keyfob. Petra is the main component. It looks and works like a modern mobile phone, but is equipped with new-generation GPS receiver and a short-range transceiver. The keyfob is a technological marvel and contains an RF transceiver, a tri-axial accelerometer, a high sensitivity microphone and a vibration function. The keyfob is compact (it's not much bigger than a two euro coin), and can be easily and comfortably clipped onto clothes. In the event of an attack or any type of danger, help is just a click away. The red keyfob button immediately activates the short-range transceiver that sends an alarm signal to the central monitoring unit (Petra), which geolocalises the user and sends an emergency call to a central operator, alerting the operator not to the location, but also sending audio captured by a microphone and the signals sent from the accelerometer on the keyfob. The operator is virtually "projected" near the person in danger and can hear (and record) the aggressor's voice for example and can detect from the accelerometer sensor signals whether the person is running or walking, or even being beaten. The operator can then provide the user with feedback and confirm that emergency services have been called through keyfob vibration. Petra's central monitoring unit incorporates the most advanced technology and a high performance digital processor. The powerful internal processor and the preloaded Linux operating system allows Petra to seamlessly perform multiple functions, including everything a modern mobile phone can do. With internal software designed around specific Synaps software on low

energy consumption devices, Petra's battery lasts longer than the average mobile phone battery, despite performing all the additional operations such as geolocalisation and keyfob communication.

Advantages

There are no comparable products currently available on the market.

Some devices have similar functions, but the few that are available have numerous defects:

- Obsolete geolocaliser devices that fall short of the state of the art
- Absence of a keyfob and oversized dimensions of the central monitoring unit, making them practically unusable
- Very short battery duration (less than 10 hours on average).

Thanks to new generation GPS, which is 10 times more accurate, 25 times more sensitive and 50 times faster than competitor technology, geolocalisation also works under unfavourable conditions, while other devices could struggle to pick up a signal. The very low consumption achieved by the smart design and optimised internal software means that a Petra battery lasts a number of days, and the keyfob (with internal battery that can be charged with the central unit) lasts a few weeks. The size of a regular mobile phone and a two euro coin, it is practical to use. In addition, Petra is the only device that protects user privacy, allowing telephone calls and text messages to be encrypted.

Petra is the only device that has been entirely, wholly designed in Italy from start to finish. It was designed in the Synaps laboratories in Area Science Park, with the advantage that every part, every piece of technology or structure, is under the company's complete control.

Fields of application

- Personal safety
- Real time police trackers
- Civil protection, logistics
- Small armies
- Undercover agents.

Market

Italy, although expansion also to other EU countries is expected soon.

For further information please contact

Synaps Technology Srl
+39.040.3755360 _ info@synaps-technology.com _ www.synaps-technology.com

Integrated IT system for Port Logistics Hub with wireless technology

	Company	Teorema Engineering Competence and Technological Application Centre
	Activity	Optimisation and integrated IT systems for logistic-port centres with wireless technology; IT training services as the exclusive Microsoft certified centre in the Friuli Venezia Giulia region.

Innovation Early Bird	Innovation To Be	Innovation in the Market
	●	
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



Integrated IT system for Port Logistics Hub with wireless technology

The research project is being conducted in the regional port system and, in particular, at the Port of Trieste, a centre for the exchange of goods, which acts as an updated intermodal exchange logistics hub, connecting the maritime, land, road and rail traffic on a single logistics platform.

The project aims to define an articulated control and communication system, allowing on the one hand the arrival/holding/exchange of goods work flows through the intermodal system (external port and vehicles) and on the other hand, the definition of an efficient connection/communication system between operators involved in the management and movement of traffic, from the arrival of ships to the unloading of goods and their shipping by other means. The achievable value objectives are linked to an increase in the effectiveness of communication between operators and on-line availability of information on the position of the goods, operator synchronisation and the scheduling of activities.

The project, based on the evolution of the NISS market solution, involves applied research and highly innovative development of software and hardware technology via radiofrequency communication and control. For the below communications technology in particular:

- WiFi technology
- Active and passive TAG
- RFID for the control and localisation of TAG cells
- GPRS/UMTS
- Algorithms for the management and monitoring of work flows and for the real time tracking of goods.

Advantages

The system is innovative compared to existing systems used in Italian and international ports. Normally communication is based on non-structured instruments, but the port Hub has a modern integration system for the different types of technology used to exchange data and information.

Fields of application

Current

Port sector

Potential

Logistics platform

Market


Reorganising and revolutionising how port operators collaborate with positive consequences on the effective port logistical handling. Almost all ports need systems of this type.

Potential diversification applies in particular to the scope of use; the solution can be efficiently used within logistics platforms in general (not necessarily port). Moreover, the tracking component can effectively be used by the manufacturing sector in relation to goods control.

For further information please contact

Teorema Engineering Srl
+39.040.3757999 _ sales@teorema.net _ www.teorema.net

MODI Dynamic Forms

		
Company WEGO Srl Activity Innovative software development platform on a highly accessible, open source web-based environment.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
	●	
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	

MODI - Dynamic Forms management system allowing the institute to manage the production of document templates (application forms, provisions and documents) relating to administration procedures.

The primary functions of MODI are:

- Dynamic Form Manager, for custom layout and content of the application template
- Dynamic personal data for managing complex personal data, pertaining to more than one applicant using different titles (physical person, company, proxy etc)
- Blank form generator, for online printing of blank application forms to be filled out in paper format
- “Ergonomic completing” Form, which helps the user fill in an application (electronic or combination)
- HTML form in “PWYS” (Print What You See) format, for printing the application exactly as it appears while retaining screen layout.

Advantages

- Information on procedures and document forms are saved in a single database (Single repository for Institute administration procedures)
- The RU is updated with a Data Base Manager, which guarantees the quality, completeness and accuracy of the information
- Information common to a number of procedures is shared for seamless uniformity
- Document templates are automatically generated using the information that defines procedures, thereby updating them at the same time as the procedures
- Template layout can be tailored to meet the needs of various institutional departments
- Templates are accessible and can be filled out online or by traditional means
- The document template shown on the screen is identical to the printout and can be fully customised to the institute’s needs.

Fields of application

Public Administration, for the management of information relating to procedures and forms.

Market

The system is expected to be used by medium to large local bodies.

The system can be used by all institutes and Organisations that need to manage forms and can be integrated with vertical management applications, with online service systems and GED systems to automate the electronic creation and storage of paper documents.

For further information please contact

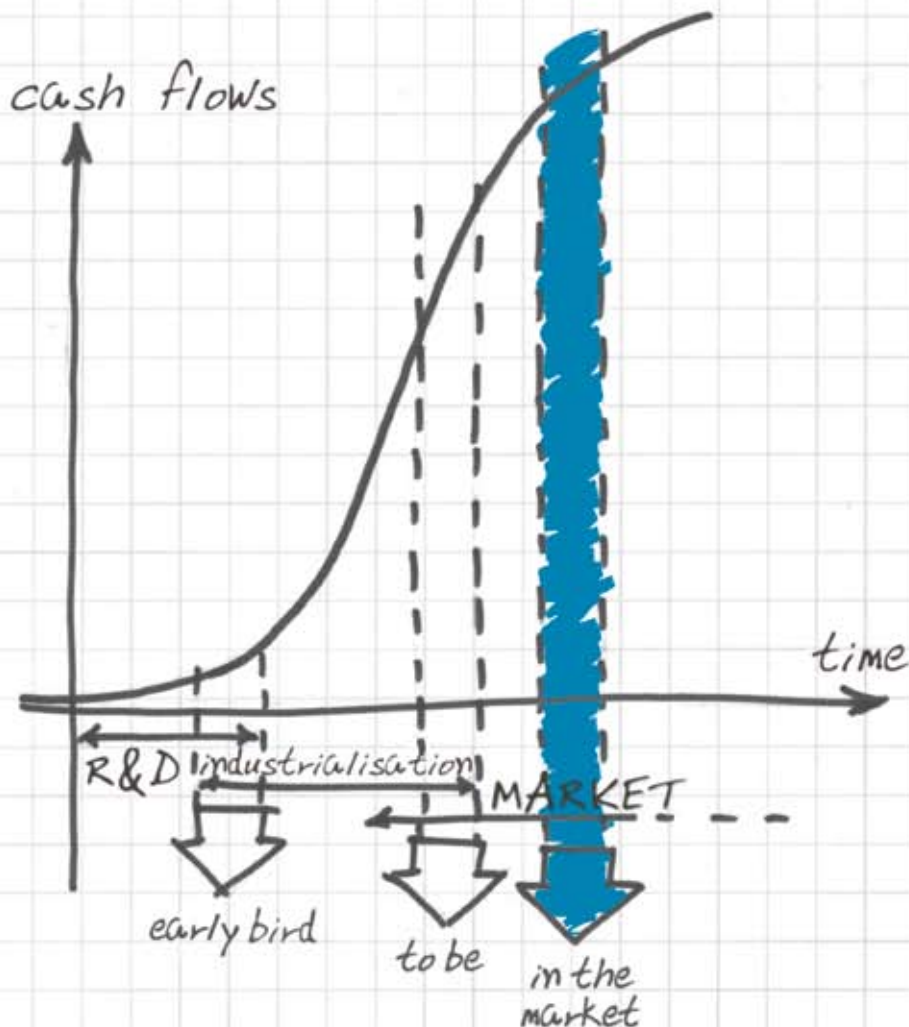
Wego Srl
+39.040.3755657 _ mailbox@wego.it _ www.wego.it

**2008
INNOVATION
3L/3T**


AREA Science Park Results

Innovation in use - Innovation in the Market

The innovation has already been transferred to one or more products, distributed on one or more markets and has already had visible impact.



c-Propoflavis

		
Company: Actimex Srl Activity: Innovative multicomposite materials for improving bioavailability of natural bioactives for the nutraceutical, cosmeceutical and veterinary fields. R&d and production for own trademarks –actiscience product lines- and on-demand for clients.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	●



c-Propoflavis is a multi-composite material containing an extract of propolis treated together selected excipients with Actimex' patented technology (WO/2003/097012 and WO/2004/050063) with mechanochemical activation.

The chemical characteristics remain unaltered while physico-chemical properties such as solubility, bioavailability and stability are improved.

c-Propoflavis is 50 times more water soluble than native propolis, allowing products to be formulated without alcohol. MIC tests show a tenfold increase in antibacterial and antiviral action.

The innovation has led to the market launch of 3 products lines, each containing c-Propoflavis and with specially devised synergistic formulations.

In particular:

Propociclina plus, for winter ailments, available in 6 varieties:

- Throat lozenges
- Effervescent tablets containing a Spirea ulmaria extract (rich in natural salicylates and treated with the same technology) and vitamin C for the first signs of flu

- Cough syrup, with antioxidants (extract of *Vitis vinifera*, which is rich in resveratrol and is treated with the same technology) and balsamic extracts for the relief of bronchial symptoms
- Alcohol-free, mucoadhesive throat spray for adults and children, with longer lasting mucus action for the relief of oral/pharyngeal cavity symptoms
- Cream and lip balm for protection against atmospheric agents.

Rinociclina (normal and soft), to bring relief and protect the nose, combining the antimicrobial and antiviral properties of c-Propoflavis with the barrier effect of a mucus-mimetic bioadhesive polymer to combat viruses.

Otociclina (adults and children), a triple-action anti-inflammatory, soothing and protective ear hygiene product.

Biodefender and **Biodefender fast**, to boost natural defences (winter, change of season, and periods of stress).

Advantages

Patented, eco-compatible technology that improves the performance of active ingredients.

Brevetti

Title: Co-grinding process for the preparation of a ternary composition

Number: WO /2003/097012

Inventors: F. Carli, P. Corvi Mora, T. Canal

Title: Quaternary Compounds comprising propolis as the active ingredient

Number: WO /2004/050063

Inventors: P. Corvi Mora, F. Carli, T. Canal

Fields of application

Dietary/food supplement

Cosmetics

Market

Pharmacies

For further information please contact

Actimex Srl
+39.040.3757850 _ info@actimex.trieste.it _ www.actimex.it

AlphaStrip II HPV



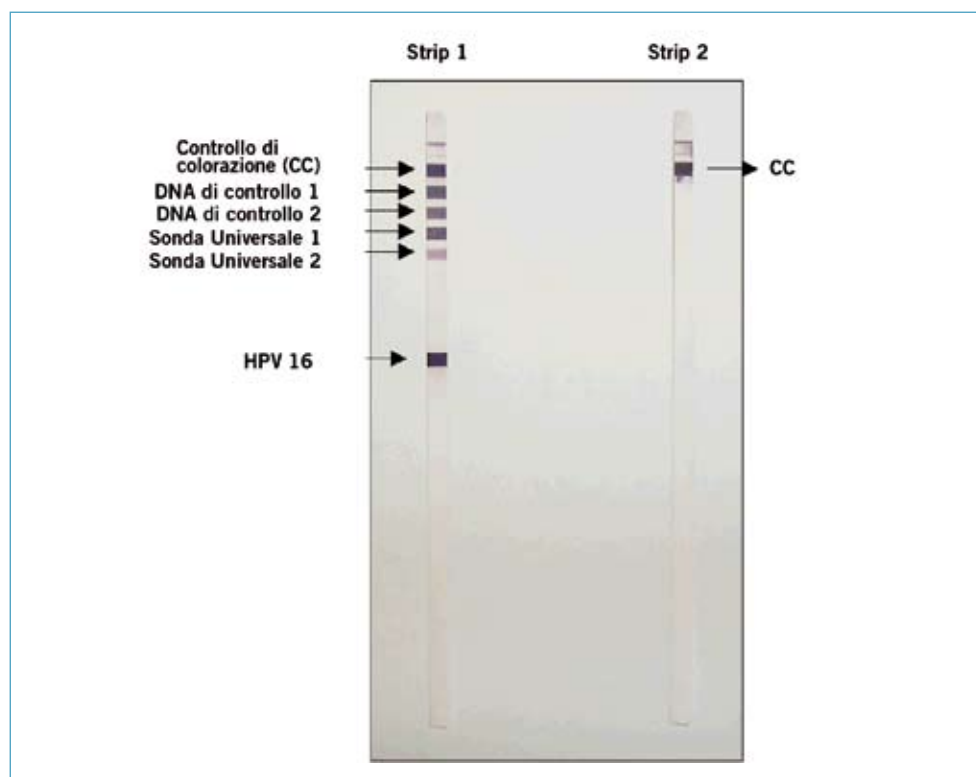
Company
Activity

Alphagenics Diaco Biotechnologies Srl
Diagnostic and prognostic analysis kits based on molecular techniques for applications in the fields of virology, bacteriology, parasitology and mycology, molecular genetics and oncology.

Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	

Strip 1: hybrid nitrocellulose strip with amplified solution from a biological sample infected with HPV 16.

Strip 2: hybrid nitrocellulose strip with amplified solution from a biological sample negative for HPV.



AlphaStrip II HPV is a diagnostic kit based on reverse dot-blot technology on nitrocellulose strips for typing of the human Papillomavirus in biological samples.

Genotyping of the Papillomavirus carries a prognostic value of considerable importance, especially in the case of infection with high risk Papillomaviruses such as HPV 16 and 18, which cause cervical cancer.

Advantages

- Types all HPVs infecting the anogenital tract using a single assay
- Assesses the risk factor for tumour progression in patients with a high risk HPV infection, particularly HPV 16 and 18
- Internal controls for monitoring the kit quality at all stages of the procedure.

Fields of application

Hospitals, private laboratories and research centres.

For further information please contact

Alphagenics Diaco Biotechnologies Srl
+39.040.3755680 _ alphagenics@alphagenics.it _ www.alphagenics.it

Filament winding


		
Company CimtecLab Srl Activity New polymeric composite and nanocomposite materials, functional analysis of composite materials.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



Figure 1
Continuous filament winding machine by VEM.

VEM SpA manufactures and sells continuous **filament winding** machines for the continuous production of composite pipes and other similar innovations. The company is based in S. Giorgio di Nogaro (Italy) and is part of the Cimtec Holding group.

CimtecLab has made tangible advancements towards improving filament winding machines, developing ad hoc technological solutions. In particular:

- 1) Innovative dual curing pipe polymerisation formulations. These formulations significantly improve the hardening properties of polyester and vinylester resin, typically used for the production of fibre-reinforced pipes.
- 2) Automatic premixing system for mineral fillers. The sand premix system replaces the traditional “gravity feed” system and generates a homogenous and compact pre-catalysed sand and resin mix, in the required proportions.
- 3) Innovative flame retardant top coat for pipe protection. The new flame retardant formula is based on nanometric additives and proprietary preparation technologies that can protect pipes from flames, preserving their structural properties even in the most extreme operating conditions.

Advantages compared to the state of the art and the competition

The three innovative technologies developed by CimtecLab offer the following key advantages:

- 1) Dual-curing formulations. The innovative dual curing formulations, particularly UV-reactive formulations, outperform the state of the art allowing:
 - faster polymerization thus boosting machine productivity
 - a sharp reduction in emissions during the processing of styrene monomer.
- 2) Sand premix. The device generates a homogenous sand-resin mix, with minimal quantity of binders, returning clear economic savings and improving the final quality of the product.
- 3) Flame retardant topcoat. Compared to competitor formulas, use of a synergistic nanometric additive optimises the effectiveness of the additives, resulting in advanced flame retardant properties with lower filler content while significantly improving ease of topcoat application and topcoat finish.

Fields of application

Current

Traditional applications for pipes produced by VEM machines primarily relate to the transport of potable, irrigation and waste water. CimtecLab technologies and flame retardant protection in particular, is applied in the production of pipes for even the most extreme applications, such as the marine sector and fire fighting equipment for industrial sites.

Potential

The new technologies will allow VEM to strengthen its presence in the abovementioned traditional sectors, while attracting new work orders in the marine sector, where regulations are more stringent. Moreover, the new technologies developed by CimtecLab, in combination with a new type of machine currently being launched (the so-called “lamellar machine”) and with new VEM technology for positioning the fibre in continuous processes (axial winding), will pave the way to sectors currently dominated by discontinuous machines and technology, such as gas or petroleum piping.

Market

Recent analysis of the competitive environment has highlighted how VEM earned the world record for the production and sale of continuous filament winding machine in 2008. Having now produced 10 machines, VEM has overtaken Amantit (Saudi Arabia) and has made even more ground over smaller-scale competitors such as TechnoBell (UK).

In 2009 VEM expects to produce 12-14 new machines to be sold not only on traditional markets (Middle East and former Soviet countries), but also in China, India and Brazil.

The sharp increase in sales can certainly be attributed to the greater reliability of the machines, backed by new CimtecLab technology.

In terms of turnover, the value of machines sold in 2008 alone was in the region of € 22-25 million. The value of CimtecLab’s know-how – reasonably estimated at around 5% of the value of a machine – amounts to € 1 million in 2008.

The increase in production and sales has led to the expansion of the VEM warehouse (the third bay is currently under construction) and to a sizable boost to the workforce, with clear benefits for the area.




Figure 2
Production of a fiberglass tube with polymerization induced by UV rays, using dual curing formulations developed by CimtecLab.

For further information please contact

CimtecLab Srl
+39.040.3755447 _ info.trieste@cimteclab.it _ www.cimteclab.it

Ciabattine (ciabatta rolls)

		
Company Activity: Dr. Schär Srl Ingredients, formulations and innovative technology for the production of gluten-free food products.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	●



CIABATTINE ciabatta rolls are a key, innovative product for the Dr. Schär range, marking a new generation of bread. Recently launched on the market, ciabatta rolls have been a huge hit with consumers, quickly becoming the company's top-selling product. The results of three significant research projects were vital to developing the ciabatta rolls: one project carried out research on various corn hybrid flours, a technological project focused on half-baked products and the third project examined the rheology characteristics of the dough. The first – of 4-year duration – focused on the technological qualities of the various types of hybrid corn flour cultivated in Italy. The end result was the creation of a line of hybrid corn that is more suitable for bread-making.

The second project was a long and complex study of part-baked products, which pose a real challenge in the gluten free sector as gluten-free products require a much longer shelf life and much greater humidity than traditional products. The project examined a number of aspects in detail, such as structural modification (hardness of the bread crumb over time) of the product through TA (texture analyser), the different baking methods and percentages and also conducted shelf life and microbiological testing. The goal was to create a part-baked product to be heated by the consumer that has the same characteristics as a freshly baked product. The third research project focused on the rheology characteristics of the dough. Highly specialised machines and technologies are needed to make the ciabatta rolls, as the dough requires complex working for it to be soft but not doughy, and so that it can be easily shaped and sliced. Moreover, larger internal cells were required, which is characteristic for this type of bread. Rheological studies were conducted using the Chopin mixolab (an instrument for measuring dough viscosity on heating) with special insoluble fibre hydrocolloid ingredients to produce the rheological characteristics of traditional dough, particularly viscosity, elasticity and stretchability.

Advantages

For the first time the traditional manufacturing method of ciabatta rolls was applied together with the choice of the part-baked form. This makes the final product much better in taste when it is consumed.

Fields of application

Direct consumers, coeliacs

Market

Current

National and European, 90% of the market share


Potential

New markets such as the US market

For further information please contact

Dr. Schär Srl - Schär R&D Centre
+39.040.3755380 _ info@schaer.com _ www.schaer.com

RS514 RFID

		
Company: Elcon Elettronica Srl Activity: Electronic systems and devices for industrial automation, automotive, avionic and space sector application.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



Active RFID module: It works on 6 channels with the option of automatically jumping to frequencies on the 2.4 GHz band. It has a correlator device to receive signals muffled by noise. Transmitted data can be encrypted. The bidirectional device transmits and receives through optimised proprietary protocols for reduced energy consumption.

The module incorporates local intelligence (microcontroller) that can be used to create local networks or cells fitted with GPRS/UMTS engine for handling data from a remote location. This configuration is already widely used in the MSD112 system for monitoring garbage container levels.

Advantages

The unit features reduced energy consumption and rapid small packet communication and its protocols allow it to operate without interference even in the presence of several dual networks in simultaneous operation.

Network configuration is automatic as is recognition of additional elements.

The unit can be used to create remote sensors with 50 – 100 metre capacity for various types of use.

Fields of application

Current

Contactless remote identification for goods, vehicles, people, traffic light or barrier activation, access control, entrance opening function for authorized personnel, keyless activation of burglar alarms or other visible devices, identification of authorized personnel in restricted access areas and for monitoring levels of garbage, gas, water, lpg or other substances.

Potential

Lock activation, real time locating of goods in large storerooms and warehouses, container positioning, safe transportation, leisure craft or cruise ships.

Market

Wherever there is a need to “recognise objects, containers, vehicles or people” without using paper documents, access keys, badges or other hands-on devices.


The active RFIDs provide the user with greater freedom in terms of acquisition speed, data handling and safety.

From transportation to the storage of goods and recognition of people or objects in the surrounding area.

For further information please contact

Elcon Elettronica Srl
+39.040.3755502 _ info@elcon-elettronica.com _ www.elcon-elettronica.com

EpUno

		
Company: Elimos Srl Activity: Electronic systems integrating hardware and image processing software for industrial automation and video surveillance.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	●

The EpUno kit
 Software version
 EIReco Lite



EpUno – A compact recognition system for vehicle licence plates.

EpUno is a professional licence plate recognition kit for automatic access control of a single mono-directional gate, engineered to guarantee outstanding reliability combined with easy installation and configuration.

The kit comprises a video module consisting of a carefully selected and specially designed high quality video camera, light and accessories for outstanding performance in licence plate recognition. Linked to a powerful computer, it has a dedicated grabber frame and is housed in a compact container. The system digitally processes complete images in real time and manages optoinsulated digital input and a relay exit for driving the motorized bars.

Its compact reengineering has slashed costs making EpUno available at an extremely competitive price.

Advantages

- Low cost
- Flexibility
- Personalisation and expandability.

Fields of application

Current

Access control

Potential

Industrial automation

Control of restricted traffic areas

Market

EpUno systems can be applied in many civil and industrial sectors and have been successfully installed in various places, either alone or integrated with video surveillance systems (CCTV) and with data and image transmission communication systems on wired&wireless networks (WAN/LAN/GPRS). They can be used:


- At campsites and holiday villages where access is to be restricted to guests and other registered visitor while guaranteeing the utmost in simplicity and streamlining both in terms of surveillance and vehicle access operations.
- In banks, to manage private parking areas and provide a service to customers while avoiding complex procedures and slashing management costs and timeframes
- In industrial complexes, alone or integrated with existing systems for weighing vehicles and controlling the radioactive charge of the load, for creating multi-functional access control systems that are simple to use and effective without any need to equip vehicles with physical reading apparatus such as transponders for badges or similar
- In car parks, for the management and control of people coming and going, calculating who is present and simple subscription, centralization and tele-maintenance management.
- In forecourts or private areas, for managing authorized access and parking in areas reserved for management.

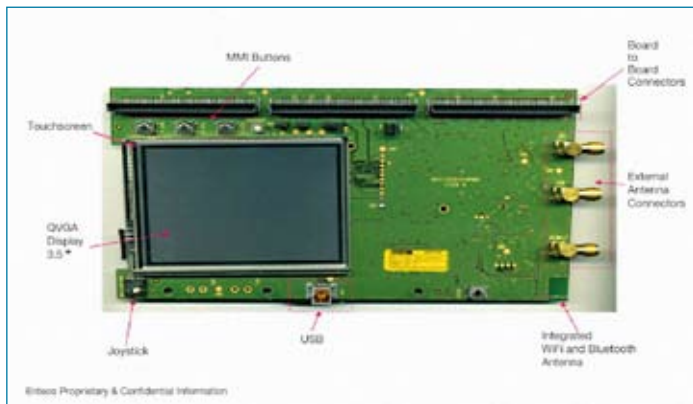
For further information please contact

Elimos Srl

+39.040.3755356 _ info@elimos.it _ www.elimos.it

EMIC Platform

		
Company Enteos Srl Activity Wireless system integrated with infomobility and telematic systems for data acquisition and remote control of remote terminals.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



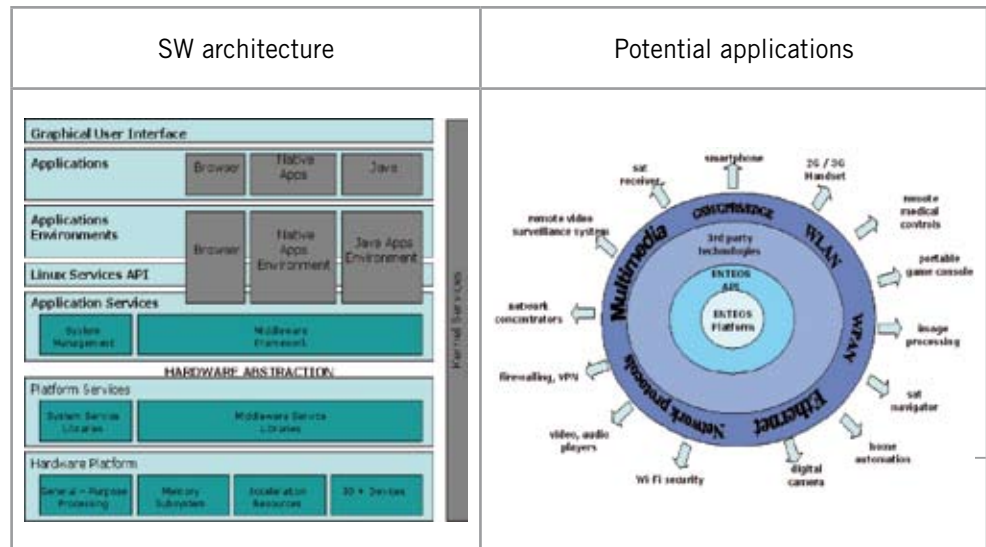
EMIC (Enteos Multimedia, Interoperability and Connectivity) is a multimedia platform based on Dual processor architecture on LINUX OS for mobile applications on GSM/ GPRS/EDGE and WiFi (802.11) networks, which is extendable on customer request.

Advantages

- **Linux Operating System.** The platform is Linux based. The advantage of this system is its open-source development model which encourages internet developers and private companies to contribute to the development of IT projects, to identify malfunctions and to effectively resolve issues. The Linux platform can operate for years without maintenance or service interruption. The platform's modular format and scalability allows various products to be developed by selecting the physical and software modular components and optimising performance from time to time.
- **Multiprocessor.** The platform was designed to support multiprocessor architecture. For example, the Freescale iMX application processor is used to execute client and/or user applications (graphics, with local or remote access) while a second processor can be specifically used for Digital Signal Processing and mobile telephony communication protocols. The iMX processor interfaces seamlessly connect the platform to other processors for performance that meets customer specifications or the demands of derivable products.

- **Portability.** All the software components for physical component and application control are portable and operate on different types of 16, 32 and 64 bit processors. Depending on requirements, ARM processors made by different manufacturers can be used, with different speed, memory and interfaces available from time to time. Freescale, Texas-Instruments and Intel ARM processors can be used
- **Multimedia, multimodal connectivity and interoperability.** The platform implements and thereby provides developers with the option of using broadband communication protocols (ethernet, WiFi, GSM/GPSR, UMTS, USB, Bluetooth) based on standards (IP, TCP, and AT, HTML, XML commands) and an embedded development environment comparable to a desktop system (C, C++, java, web based languages, languages interpreted). This facilitates platform integration in existing work environments and allows the transfer of legacy applications to Linux.

The software architecture of the platform allows users and developers to reuse previously implemented software modules and optimise investment.



Market


The EMIC system is currently used by some companies within two European projects (Liaison and Agile) for the development of LBS (Location Based Services). An integrated terminal, based on the EMIC platform, has already been developed, again, within the scope of a European project.

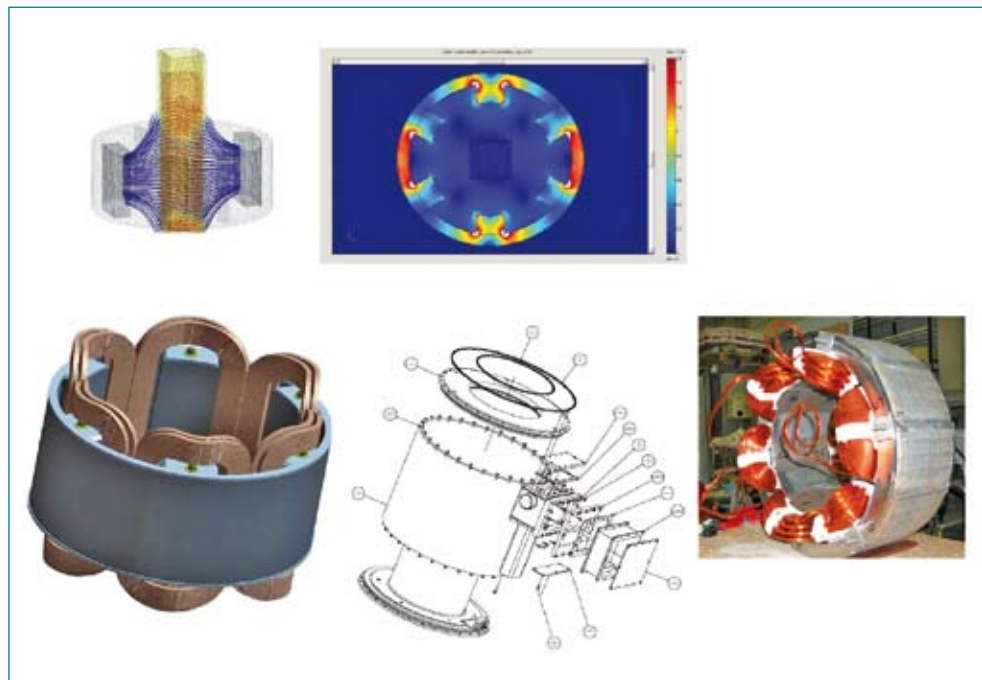
Considering the type of platform, it is not expected to be sold as an object, instead user licences could be issued for the SW which is part of EMIC, or, alternatively R&D could be sold for product integration. The target market therefore extends to all companies that develop telecommunication products and need “open” systems for their creation of their applications.

For further information please contact

Enteos Srl
 +39.040.3755711 _ info@enteos.it _ www.enteos.it

Electromagnetic stirrer systems

		
Company: Ergolines Lab Srl Activity: Innovative products and services focusing on ergonomics. Innovative sensor systems for measuring physical variables and process control. Design for the iron and steel, consumer and automotive sector.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



Electromagnetic Stirrers are special electric machines that generate a rotating magnetic field with characteristics that guarantee optimal cooling and solidification of steel in continuous casting machines. Accurate engineering, construction and installation allow these machines to protect steel from a number of typical defects – superficial, internal or form defects – that jeopardize performance and workability of the material.

Advantages

- Its engineering takes into account the geometric features of the casting process (available spaces and ingot mould)
- Optimised magnetic field lines based on the project's steel requirements
- Greater reliability, lower maintenance costs and enhanced operator safety.

Fields of application

Current

Continuous casting of steel

Potential

Aluminium and non-ferrous metal foundries, subject to technological adaptations.


Market

Europe, Brazil, India

For further information please contact

**Ergolines Lab Srl
+39.040.3755422 _ info@ergolines.it _ www.ergolines.it**

modeFRONTIER®

		
Company ESTECO Srl Activity Optimisation technology and SW systems applied to industrial design.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



modeFRONTIER® is a software application that provides support at all engineering stages by providing access to the most advanced optimisation technologies via an easy and intuitive user interface.

Advantages

modeFRONTIER® is an innovative product that harnesses the power of digital optimization for engineers, researchers, analysts or scientists, who must answer the eternal question: “What’s the best solution to my problem?”

The most remarkable features of the modeFRONTIER® software environment are its capacity to adapt to any field of application, regardless the design tools normally used.

Well ahead of the competition in its ease of use and its ability to provide a solution even for those involving the pursuit of several objectives simultaneously, modeFRONTIER® positions itself as cutting edge research innovation instrument.

In practice, it behaves like a “calculation robot”, automating numerical analysis and leading it “intelligently,” towards optimal solutions.

Fields of application

Current

Automotive, aerospace, manufacturing, pharmaceuticals, petrochemicals.

Potential

modeFRONTIER® is a software tool that by its very nature can be used in virtually any field where the variables at play (at entry and exit) are recognized in the context of a problem to be optimized (goals and constraints). Sectors of huge potential are those where the product has until now only been sporadically used, such as molecular chemistry and the financial markets.

Market

Current

The primary market is the automotive industry, accounting for around 50% of the total installed licenses. Geographical segmentation, on the other hand, shows Japan as the country with the highest sales. Although the automotive industry is the primary market, others industries are beginning to pick up the pace. Take for example the oil production industry, with companies such as Petrobras, one of the leading users of the technology, or companies in the consumer products sector such as CANON or NIKON. One rapidly expanding market is the chemical industry, with companies such as BANDO Chemicals and BASF.

Other companies optimizing their engineering process with modeFRONTIER® are: BMW (diesel engine division), Ferrari (Formula 1 and Gran Turismo cars), Toyota, Embraer (Brazilian aerospace company), ABB, Canon and EADS.


Potential

The modeFRONTIER® product can optimise any design process, and is therefore suitable for a wide spread of application fields and markets.

For further information please contact

ESTECO Srl
+39.040.3755548 _ sales@esteco.com _ www.esteco.com

Linea Duplico^{RealTime}

		
Company: EuroClone SpA Activity: Diagnostic assays based on molecular and immunological techniques (ELISA) for the rapid detection of chemical contaminants in food and veterinary diagnostics.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



The **Linea Duplico^{RealTime}** is a test based on simultaneous gene amplification (by PCR polymerase chain reaction) and fluorogenic probe detection. The assay can detect the specific amplification product by monitoring the increased fluorescence signal that is directly proportional to the quantity of amplified product.

The product carries EC marking and is duly licensed under ROCHE Corp. patents.

The Duplico^{RealTime} products range includes:

- A kit for identifying the primary genetic polymorphisms of Coagulation Factors
- A kit for identifying the primary targets responsible for Respiratory Infections and Sexually Transmitted Diseases
- A kit for identifying MRD (Minimal Residual Disease)
- A kit for the therapeutic monitoring of certain tumours.

Advantages

- Simple: ready to use reagents
- Flexible: one set-up protocol for various applications
- Fast: one-touch amplification and detection
- Automatic: genotype analysis through analysis software
- Contamination-free: no Post PCR manipulation
- Standardized: standard protocol
- Multi-parameter: a new, complete diagnosis system.

Fields of application

- Medical Genetics and Haematology laboratories
- Clinical Microbiology laboratories
- Oncology Institutes providing care and diagnostics
- Hospital Clinical Pathology laboratories and private laboratories.

Market


The In Vitro Diagnostics market. Since the line was launched between 2006 and 2007, the Italian market has grown by more than 30%, generating revenues in the region of one million Euro in 2008.

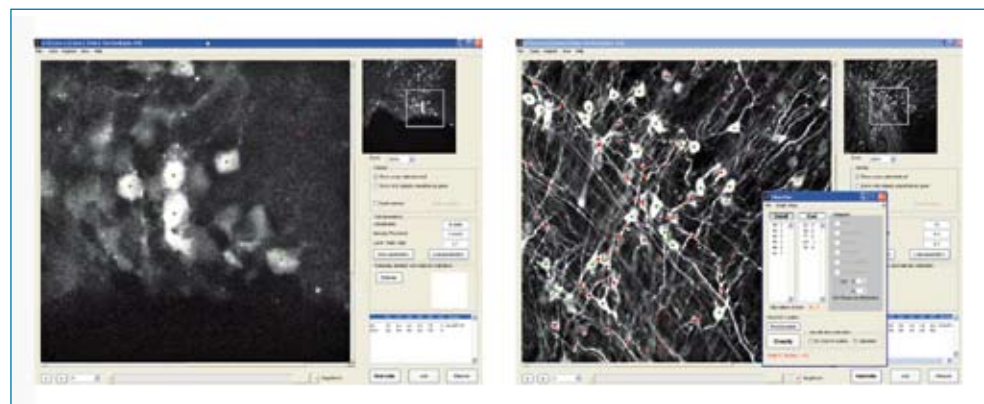
Distribution began in 2008 with still modest results in Europe and elsewhere.

For further information please contact

EuroClone SpA
+39.040.3755411 _ info@euroclone.it _ euroclone.ts@euroclone.it _ www.euroclone.it

ECELLence

		
Company Company		
Glance Vision Technologies Srl - SISSA spin-off. Advanced image processing software and Computer Vision solutions. System integrators.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



ECELLence is innovative software for the quantitative analysis of microscope images. It is a software tool for identifying and counting cells, based on the most recent machine learning techniques and on innovative user interaction.

ECELLence can be used in many fields of research, whenever microscopy images require to be analysed for object counting or classification. For example, thanks to its 3D analysis capability, ECELLence can be used in biology on confocal microscopy images, where cells must be accurately counted through the various layers.

Advantages

- User friendly
- Innovative interactive learning criteria
- Almost total absence of parameters to be adjusted.

The philosophy of ECELLence is to “provide the system with some examples, immediately assesses the result and add further examples if the result is unsatisfactory”. The user can then surf the images, check the result and, at the same time, improve the count. The entire learning and counting stage is completed in a matter of minutes.

Patents

Title: Procedure for recognising and counting particles and equipment

Number: SL:SS/U3-3047

Application of: 08/05/08

**Country
protected by
the patent:** Italy

Fields of application

Current

ECELLence is currently used in various neurobiological research laboratories in Italy and elsewhere. Researcher interaction has been fundamental to perfecting the product.

Potential

Other sectors where microscopy is used. In the future, ECELLence may be applied in the medical field of automatic analysis.


Current market

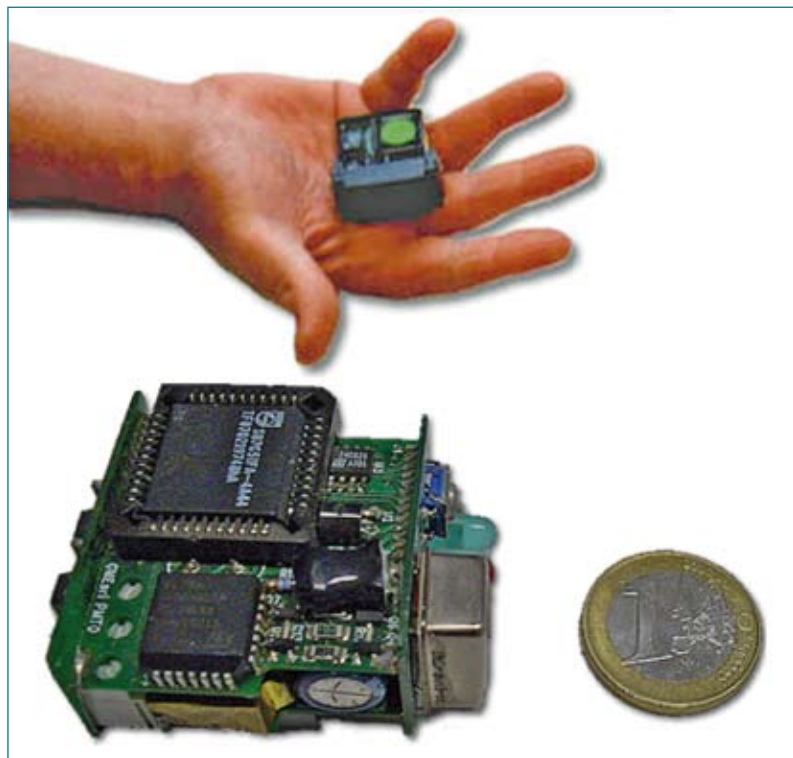
The market is the research laboratory market, in particular the biology or neurobiology sectors.

For further information please contact

Glance Vision Technologies Srl c/o SISSA
+39.040.3756559 _ vanzella@gvt.it _ www.gvt.it

Wallmod

		
Company Activity		GME (General Micro Electronics) Srl Electronic devices and home automation systems.
Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



Wallmod is the world's smallest power line modem, transmitting data over power lines, thereby eliminating the need to cable a home or building.

It is designed to be inserted in a wall switch (occupying just 1 module).

There are various versions available: normal, Input/Output, with temperature sensor, with IR sensor.

Thanks to its high technological content, it is one of the few Italian products to have been nominated for a European Information Technology Award.

Advantages

- Dimensions of 25 x 45 x 45 mm
- The latest version will be smaller still.

Fields of application

Current

Home Automation, Energy.

Potential

- All industrial applications and domotics
- The current modem can function with Ehs/Konnex standard
- It can be redesigned to incorporate standard automation demands.

Market

Current


Hundreds of modems have been sold in dedicated models

Potential

The modem can be redesigned for other mains carrier home automation standards (other technologies with faster data and information transmission over the electrical network)

For further information please contact

GME Srl
+39.0434.640556 _ info@gmesrl.it _ www.gmelab.com

		
Company Health Robotics Srl Activity Robotic systems for the preparation of injectable medicinal products in the hospital sector. Automation and robotic systems for biomedical applications.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	

CytoCare is the world's first and only automated robotic system for the handling and preparation of anti-cancer medicine in hospitals and is the flagship product of Health Robotics. Assisted and controlled by a technician, the CytoCare system automatically prepares the anti-cancer medicine in an isolated, sterile environment. CytoCare uses innovative technology, both in its hardware and software components. A 6-axis anthropomorphic robotic arm is at the heart of the system and guarantees complete control over all movements required for the handling of cytostatic agents.

The software operates on the latest platforms and development tools ensuring the utmost in data safety and a user friendly system.

The robot is currently used at the Charing Cross Hospital in London (UK), one of the leading global institutes for cancer care, the Adventist Hospital in Penang (Malaysia), the Rigshospitalet in Copenhagen (DK), the Kaiser Franz Josef Spital in Vienna, the Ceske Budejovice in the Czech Republic, the Riuniti Hospital in Ancona, the IFO, the Biomedical Campus, Umberto I and San Camillo in Rome, Foligno Hospital and Bolzano Hospital.

Two units are already in operation in the United States at the University of Colorado in Denver and at the Baylor University in Dallas, while systems are currently being installed at the University of Pennsylvania in Philadelphia, the University of Michigan, the Karmanos Cancer Institute in Detroit, the Jackson Memorial Hospital in Miami and at the Brigham and Woman's Hospital in Boston

Patents

PCT APPLICATIONS

Intl. Application No.	Intl. filing date	Intl. Publication No.	I.P. date	Title	Notes
PCT/IT2006/000688	27-Sep-06	WO 2008/038311	3-Apr-08	Mechanical stirrer	3)
PCT/IT2006/000739	16-Oct-06	WO 2008/047389 A1	24-Apr-08	Device for the disposal of toxic wastes	3)
PCT/IT2006/000740	16-Oct-06	WO 2008/047390 A1	24-Apr-08	Dosing device	3)
PCT/IT2006/000816	22-Nov-06	WO/2008/062485	29-May-08	Device for detecting elongated bodies	3)
PCT/IB2006/003505	7-Dec-06	WO 2008/012596 A2	31-Jan-08	Machine for the preparation of pharmaceutical products	1)
PCT/IB2007/003577	21-Nov-07	WO/2008/062285	29-May-08	Method and machine for handling toxic substances	2)

APPLICATIONS IN ITALY

Italian Application No.	Italian filing date		P. date	Title	Notes
BO2006A000840	6-Dec-06	n.a.	6-Dec-06	Metodo e macchina per manipolare sostanze tossiche	4)
AN2006A000044	26-Jul-06	n.a.	26-Jul-06	Dispositivo per la manipolazione automatica di sostanze tossiche	4)

Notes

1), 2): Patent applications have been filed in the following countries: European Community, Russian Federation, Switzerland, Norway, Turkey, USA, Canada, China, Japan, Singapore, Australia and South Korea

3): Valid in PCT convention member countries

4): Valid in Italy

Advantages

Process automation revolutionises the preparation of highly toxic oncology drugs, which until now required manual dose preparation for individual prescriptions, posing a risk to hospital pharmacy staff and to patients.

The use of CytoCare in organising the hospital pharmacy optimises the use of cytostatic agents, reduces preparation times and medicine wastage, and allows the creation of efficient batch productions. This also rationalises costs thanks in part to improved efficiency in human resource management.

There are no similar solutions on today's market offering all the functions and system versatility of CytoCare. The few products that have so far been announced are still at the prototype stage and have never entered into actual use at hospital level. The technological advantage of the CytoCare system, with intellectual property protection based on three Italian and six international (PCT) patent applications, means the chances of other companies acquiring a significant market share are remote.

Fields of application

Automation of hospital medicines, automation of laboratories for the outsourced production of personal therapies.

Market


In accordance with an industrial partnership agreement between Health Robotics and the Loccioni Group, all Health Robotics CytoCare products are sold in countries other than Italy, while the Loccioni Group is responsible for marketing the product in Italy. The international market is covered via agreements with multinationals, which are leading operators in the biomedical sector.

For further information please contact

Healt Robotics Srl

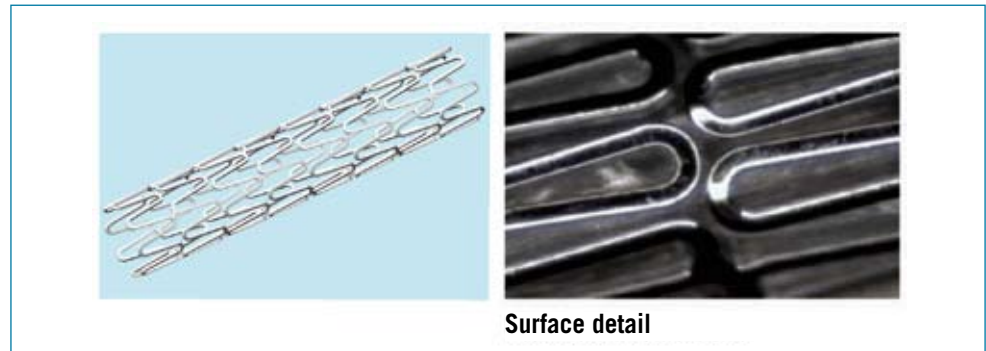
+39.040.3757837 _ info@health-robotics.com _ www.health-robotics.com

Numen

 International Biomedical Systems			Company IBS - International Biomedical Systems SpA R&D and production
			Activity Biomedical cardiovascular system devices (coronary stents), image acquisition, processing and transfer systems for medical applications.
Innovation Early Bird	Innovation To Be	Innovation in the Market	
		●	
Innovation for the Territory	Innovation for Trieste	Innovation for You	
●	●		

Key:
LMS – Less Mismatch Stent

The “LMS – Less Mismatch Stent” theory has been adopted: multiple 1 mm cells slightly offset against each other to form “tract channels”; other thinner connectors are set at 45° on a sinusoidal trajectory. The segments of the individual cells with their connectors are set at 45° to the blood flow to reduce mismatch between the stent and artery.



Numen is an L605 cobalt-chromium coronary stent, mounted on a rapid-exchange Delivery System.

Numen stents are used in Percutaneous Transluminal Coronary Angioplasty (PTCA), in the event of coronary occlusion or artery stenosis, to allow recanalisation and restoration of blood flow.

Advantages

- Minimal mechanical impact – Less Mismatch Stent theory*
- Very thin mesh (65 micron)
- Minimal profile (0.8 – 0.95 mm – 0.9 and 3.0 mm diameter)
- Outstanding longitudinal flexibility
- Excellent flexibility
- High radial force
- Conforms exceptionally well to the vessel
- Outstanding intracoronary stability.

Patents

Title Endovascular prosthesis and implementation procedures

Number: PCT/IT2006/000018

Granted on: 27/08/2008

Application of: 13/01/2006

**Country where
patent is
in place:** Italy, Europe, USA

Fields of application

Interventional Cardiology

Market

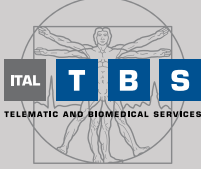
The Numen stent, awarded EC certification by the notifier (TUV GmbH, Munich, Germany) no. 0123 in July 2007, is currently used in more than 50 haemodynamics laboratories in Italy and Europe, including France, England, Spain and Austria and in several Central and Eastern European countries.

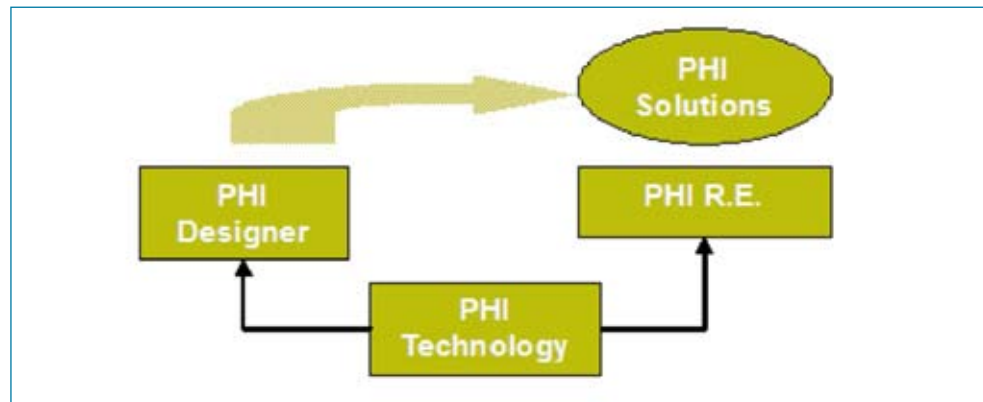
IBS France Sas was set up in 2008 to distribute IBS products in France. The product is also sold in Russia, China, Hong Kong, Pakistan and Costa Rica.

For further information please contact

IBS - International Biomedical Systems SpA
+39.040.3755641 _ info@ibsmid.it _ www.ibsmid.it

PHI Technology

		
Company ITAL TBS Telematic & Biomedical Services SpA Activity Clinical engineering and endoscopy services, evaluation technological and economics of biomedical equipment, telemedical and teleassistance IT services.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



PHI Technology is a technological architecture for the creation of e-Health applications for use in the health sector (hospitals, clinics and general practitioners) for the daily management of information. The main feature of PHI Technology is its use of Model Driver Architecture (MDA) together with a Service Oriented Architecture (SOA), based entirely on the most recent open standards.

Advantages

- A user-friendly interface allows 'laymen' to create new application solutions
- Creation of solutions that can be reused by health care institutions
- Simple data management
- Possibility of installing the primary components on a PC or on a distributed server network with single or multi node configuration for wider access
- Primary components available in several languages allowing multiple users to make use of a given application without changing functions.

Fields of application

Current

Health organisations (hospitals, clinics and general practitioners)


Potential

Ongoing assistance, telemedicine

For further information please contact

ITAL TBS SpA
+39.040.92291 _ info@italtbs.com _ www.italtbs.com _ <http://support.italtbs.com/wiki>

Microdry

		Company Microglass Srl
		Activity Microwave machinery for drying materials in industrial process through an innovative, electro-radiation process.
Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	

Forni a tecnologia combinata
MICROONDE, INFRAROSSI e ARIA CALDA termoregolata
 impostabili con PLC touch screen user-friendly
 per produzione di piccoli lotti e
 prototipazione just in time

VERNICIA Essiccazione inchiostri e pigmenti Essiccazione microbolle	PLASTICA Essiccazione vernici su materiale plastico Assciugatura componenti
TECNICHE Essiccazione vernici e smalti su metallo, legno, plastica e tessuti	VERDE e FITOCIDA Pulverizzazione Essiccazione Curing e post-curing
ALUMINI Essiccazione vernici Essiccazione componenti in legno e agglomerati di resine di legno Incollaggio	STAMPANTI Assciugatura inchiostri

microdry
line



Microdry is a line of combined technology MW-IR-Hot air compact ovens that can be moved using a standard fork-lift truck, incorporating microwave-IR-hot air combined technology.

Advantages

The key innovation introduced by Microdry lies in flexible treatment options and in its versatility. IR rays are radiated by special Microglass patented panels.

A PLC touch Screen provides a simple solution for selecting the energy sources, power settings and cycle times.

Patents

Title: Device for the controlled emission of electromagnetic waves

Number: PN2008A000036

Application of: 12/05/2005

**Countries where
patent is
in place:**

Italia

**Third part
transfer:**

No

Fields of application

Microdry ovens are ideal for any type of company requiring a machine to carry out tests or develop prototypes, and for small – even artisan – companies, with small production output. Whatever the final objective, the gains in terms of practical features and reduced sample/product creation times should not be underestimated. In the past year, Microdry has been applied to many uses. It has even been tested by Thun for drying ceramic material and by Inver for drying paints on ferrous supports/materials.


Market

To date many prominent companies have used Microdry. In recent months alone, Microglass has collaborated with THUN SpA, Inver SpA, Dana SpA, Dalmine SpA, Multitecno Srl (Zignago Group) and many others.

For further information please contact

Microglass Srl
+39.0434.963211 _ info@microglass.biz _ www.microglass.biz

Geocall GISWare

		
Company Over I.T. Srl Activity Study, design and production of IT solutions for customer contact management and field force organization and optimisation		
Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



GISWare is the innovative module of the Geocall application platform for the development of GIS (Geographical Information System) solutions to display and manage data and information on a map.

Thanks to its service-oriented architecture, Geocall GISWare technology can satisfy any need of GIS solutions development reducing, at the same time, the gap in terms of complexity and skills necessary to develop cartographic features in enterprise applications.

Geocall GISWare presents many advanced features such as the display and overlapping of points on a map, the creation of thematic maps,, address normalization and route planning and optimization.

Thanks to these features Geocall GISWare suits different business areas , offering, for instance, GIS solutions to support marketing and promotional campaign administration, the optimisation of field activities and the analysis of statistical data for corporate decision-making.

Geocall GISWare advanced performances are enhanced through the integration with Google Maps standards, which are known and used on a global level. The result is a solution with high level performances and usability.

Advantages

- Easy to Use
- Simple, user-friendly interface
- Rapid development
- Stability
- Reduced infrastructure costs

Fields of application

Current

Manufacturing, healthcare, services

Potential

Its special architecture and its user-friendly features make GISware suitable for new market industries, such as public sector, banks and insurance companies.

Market

GIS applications developed on the Geocall GISWare platform are currently used by leading Italian companies such as large industrial groups and service and utility providers. The platform is also used in the Healthcare industry to do studies and statistics on healthcare services and structures in Italy.


The applications developed with Geocall GISWare support different kind of activities such as:

- localisation of services: e.g. GIS applications with features addressed to users/ customers such as search facilities to find branches, shops, public transport stops, stations, etc on web portals
- Tactical/strategic planning: GIS solutions to manage information obtained from the combination of
- alphanumeric and spatial data and to do socioeconomic analysis for corporate decision making
- Geomarketing: GIS solutions for improving the effectiveness and efficiency of decision-making in Sales, Distribution and Customer Service activities
- Organization of field resources: localisation of teams operating in the territory (sales agents/technical operators) to optimise efficiency in terms of client portfolio, agenda and route planning, managing emergency situations on the field etc
- Asset management: solutions to monitor the status of assets' service and performances in a specific area/location and to manage maintenance activities.

For further information please contact

Over I.T. Srl
+39.0434.562911 _ marketing@overit.it _ www.overit.it

Netscience

		
Company Promoscience Srl Activity Integrated data and knowledge management software systems for technical-scientific dissemination and communication.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



Netscience has been especially designed and created to provide research partners with a web platform for:

- Content Management: tools for easily and quickly publishing a research project website without special expertise and keeping the site up-to-date, while drawing on contributions from all participants
- Project management: project Work Package management and control functions. Procedures for planning activities and deliverables and for coordinating staff participation
- Document Management: documentary library sharing and automatic update alert tools.

Advantages

- Integration of three tools in a single platform for more efficient management and dissemination activities
- Sizable custom content for tools to meet specific collaborative research programme needs and for European Community Framework Programs in particular
- Very user friendly
- Adoption of a What You See Is What You Get (WYSIWYG) philosophy for all interfaces (content administration interfaces have the same structure and the same graphics as the public section of the site)
- High quality websites are within reach (both in relation to content organisation and the straightforward identification of pertinent information in terms of graphics and layout).

Fields of application

Current

Projects within the Seventh Framework Programme; national projects (FIRB, PRIN etc); international collaboration initiatives (associations, scientific society etc); Industrial research laboratories.

Potential

Research Sponsor Web Portals (European Union, ESF, MUR etc) to collect information on the various projects sponsored. The system keeps individual websites separate and at the same time provides a “metamotor” that pulls available content from several websites together.


Market

More than 110 European research groups are involved in over 20 collaborative research projects.

For further information please contact

Promoscience Srl
+39.040.3755690 _ info@promoscience.com _ www.promoscience.com

Track & Warn

		
Company Proposita Sas Activity Software systems for organised large-scale distribution and production, processing, tracking and sales process support in the food sector and particularly on mobile devices with RFID and GPS technologies.		
Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



Track & Warn. Warn, track and document are just some of the key words for the sound management of products withdrawn from the market due to non-conformity. Sound management of withdrawn products allows rapid intervention and the ability to consequently justify proposals for correct application of current standards to the authorities.

Track & Warn solves GDO problems with an Intranet based system which permits:

- Automatic generation of mail notices
- Management of the document file relating to the product withdrawn
- Tracking and reporting of movements between sales outlets, platforms and suppliers
- Documentation for the authorities.

Advantages

Independence from other systems and full integration

Fields of application

Current

Large-scale distribution

Potential

Food industry

Market

Current

Top client GS-Carrefour Group


Potential

Prospect on Large-scale distribution

For further information please contact

Proposita Sas
+39 040 375 5391 _ arealab@proposita.it _ <http://www.proposita.it>

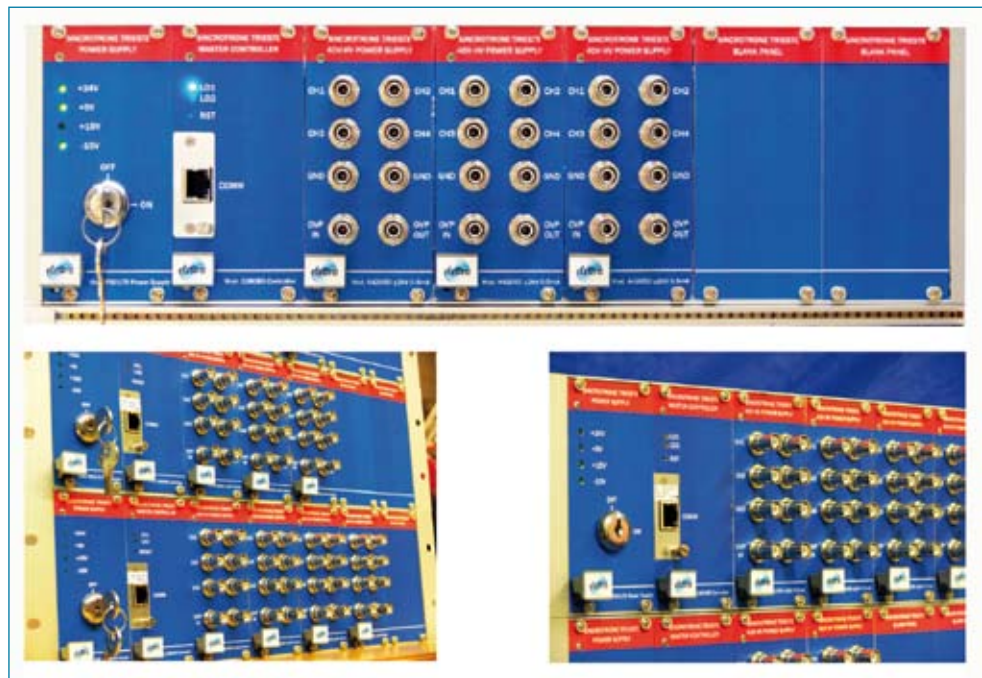
Bipolar Power Supply Systems



Company
Company

Sincrotrone Trieste SCpA – Elettra Synchrotron Light Laboratory
Basic, applied and pre-competitive national and international research on biological structures, on the structure of solids and dynamic phenomena occurring on surfaces, superconductors, metal structures and composite materials.

Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



The **MAS-TER** is a high voltage **bipolar power supply systems** designed to control and monitor the shape of piezoelectric bimorph mirrors that reflect the X-rays produced by synchrotron light sources and to convey them to the testing stations. These power supply systems are characterised by low noise output, high stability and are digitally controlled by an integrated feedback systems.

Developed by the Instrumentation and Detectors laboratory of Sincrotrone Trieste, A4205D models are part of a system that also includes a DSP control device (C2808D9), and a power supply (PS0175). The system is made up of several modules: each module has 4 independent output channels, and up to 4 modules can be hosted in a crate, for a maximum amount of 16 channels. Besides the offers 5 communication interfaces: USB, Ethernet TCP/IP and UDP, RS232 and Wi-Fi.

Advantages

The A4205D is unique on the market in terms of flexibility and configuration versatility. For the first time, output voltage is obtained thanks to the innovative digital output linearization system, which easily optimises control for every load condition.

Moreover, performances in terms of noise (<0.0004% of the maximum voltage), precision, accuracy and stability combined with its compact size (4 zero-crossing bipolar outputs in a single module) and its low power consumption are simply outstanding. The software is the most suitable solution among piezoelectric bimorph mirror movement and control solutions. Tools have been developed to integrate this power supply system with the most common control systems (EPICS and TANGO) used in synchrotrons all over the world. A special feature of the MAS-TER that sets it apart from competitor power supply systems is the dual protection (hardware and software), which guarantees the utmost in security and prevents the damage to the mirrors.

Fields of application

Current

- Piezoelectric mirrors (silicon activated biomorph mirrors) control
- Electrostatic lenses polarization.

Potential

- Ion Chambers polarization
- Photon BPM polarization
- Generic applications requiring high voltage (including multichannel systems).


Market

The systems have already been installed in the synchrotron light laboratories in Chicago, New York, Oxford, Berlin and Paris and have generated annual turnover to the order of € 300,000.00 over the past three years.

For further information please contact

Sincrotrone Trieste SCpA - Elettra Synchrotron light laboratory
+39.040.3758303 _ ilo@elettra.trieste.it _ www.elettra.trieste.it

Super Screen Tetra

		
Company Tecna Srl Activity Test kits for the detection of food and feed contaminants		
Innovation Early Bird	Innovation To Be	Innovation in the Market
		●
Innovation for the Territory	Innovation for Trieste	Innovation for You
●	●	



Super Screen Tetra is a test kit based on a competitive receptor assay with a non-radioactive tracer. The receptor is produced using genetic engineering methods. The solid phase (microtiter wells) is coated by a specific DNA sequence. Because of the alternative binding of the receptor either to the DNA or to the analyte, increasing the tetracycline concentration in the reaction liquid the amount of receptor bound to the solid phase is proportionally decreasing. After the competition step, the receptor is detected through an anti-receptor antibody. The antibody is conjugated with an enzyme that will subsequently yield to a coloured reaction product. The colour developed is inversely proportional to the quantity of tetracycline in the sample. Total assay time is 90 minutes.

Advantages


- The method is less specific than currently available immunoassays for tetracyclines: the whole family of compounds can be detected.
- When compared to the only other kit based on a receptor assay, SuperScreen allows semiquantitative determination and high throughput testing. Moreover, the same test kits can be used to test many different materials.
- The measuring range includes the MRL's (Maximum Residue Limit) established by EU Legislation for animal tissues, milk and eggs.
- The kit has been validated for different matrices including tissues, urine, raw milk, honey and seafood.
- The sample preparation is very simple and ready-to- use solutions are provided with the kit.
- A calculation spreadsheet can be downloaded from Tecna's website www.tecnalab.com allowing quick data handling.

Fields of application

Food and feed industry, governmental and service laboratories.

For further information please contact

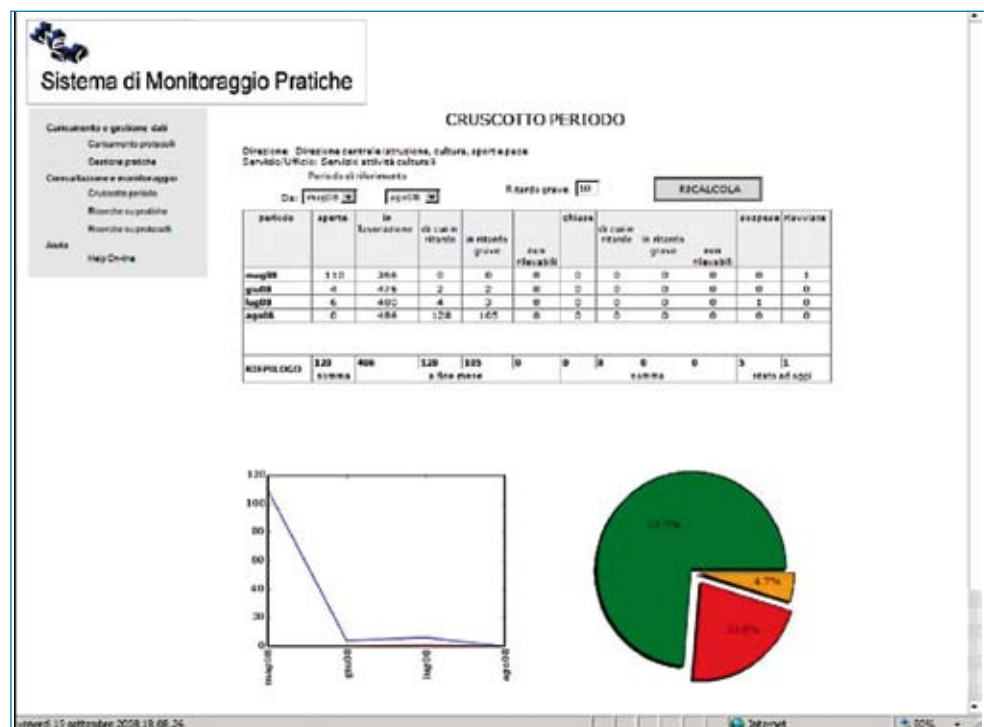
Tecna Srl
+39.040.3755341 _ tecna@tecnalab.com _ www.tecnalab.com



Company: WEGO Srl

Activity: Innovative software development platform on a highly accessible, open source web-based environment.

Innovation Early Bird	Innovation To Be	Innovation in the Market
Innovation for the Territory	Innovation for Trieste	Innovation for You



SIMO - Monitoring and procedure tracking system, a BAM (Business Activity Monitoring) tool making process management data and information available to the management of public bodies and companies.

The primary functions of SIMO SMTP are:

- Importing of management data from different sources (protocols, vertical management applications, individual IT tools, manual loading and so on)
- Presentation of key summary management data via the web
- Possibility of extracting detailed data in Excel format for subsequent processing

- Researching procedures and protocols for all primary research parameters (dates, originators, protocol number, procedure number, subject etc).

Advantages

SIMO SMTP allows:

- the heads of organizational structures to gain access to a continuously updated control panel for bottle neck analysis to pinpoint and remove bottle necks and any imbalances that may appear in the work flow
- primary management indicators to be brought to the notice of process owners, who can then efficiently and effectively measure the processes they manage
- All authorized users to track how a case plays out in its entirety, even when this involves several members of management in different offices.

SIMO SMTP is an innovative management control tool and is invaluable for simplifying audit and quality control processes.

Fields of application

Current

Public administration, for monitoring and tracking (the progress) of current cases.

Potential

Manufacturers and Service Providers.

Market

Current

The system has been implemented by the Autonomous Region of Friuli Venezia Giulia and has been configured to handle over 1100 types of procedures.

Potential

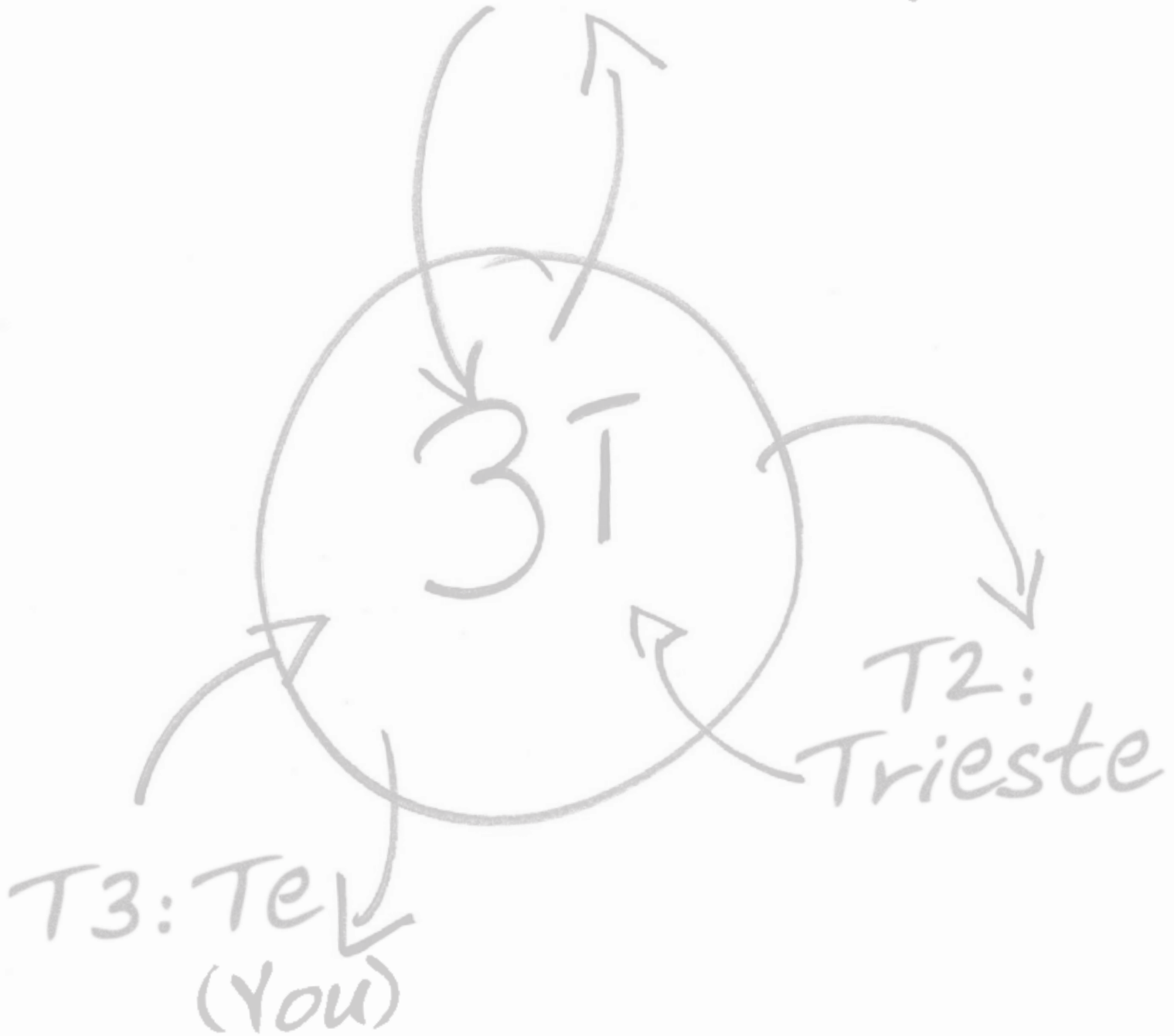
The system is expected to be used by other medium-to-large local bodies.

The system can be used by all companies/organisations that handle processes and can be integrated with vertical management applications to make the acquisition of monitoring and tracking data fully automatic.

For further information please contact

Wego Srl
+39.040.3755657 _ mailbox@wego.it _ www.wego.it

T1: Territory





HiTech



■ AREA Science Park
Padriciano, 99 - 34012 Trieste - Italy
Tel. +39.040.3755111
Fax +39.040.226698
info@area.trieste.it

www.area.trieste.it